DOCUMENT RESUME

ED 144 206　　　　　　　　　　　　　　　EA 009 906

AUTHOR	Gillette, Arthur Lavery
TITLE	Beyond the Non-Formal Fashion: Towards Educational Revolution in Tanzania.
INSTITUTION	Massachusetts Univ., Amherst. Center for International Education.
PUB DATE	77
NOTE	318p.; Best copy available
AVAILABLE FROM	Center for International Education, Hills House South, University of Massachusetts, Amherst, Massachusetts 01003 ($5.50)
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	Bibliographies; *Case Studies; *Developing Nations; *Economic Development; Educational Administration; *Educational Development; Educational Finance; Educational History; Educational Objectives; Educational Trends; Elementary Secondary Education; *Nonformal Education; Sociocultural Patterns
IDENTIFIERS	*Tanzania

ABSTRACT

This book presents a lengthy case study of education in Tanzania that examines 1) the emerging relationships between formal and nonformal education in Tanzania, 2) the models of socioeconomic development reflected in the relationships between formal and nonformal education, and 3) the evolution of the Tanzanian revolution as reflected by the relationship between formal and nonformal education. Data for the study were drawn mainly from published documents on education in post-revolution Tanzania, supplemented by conversations with Tanzanian and foreign educational researchers and practitioners. Most of the book consists of a case study that outlines the historical development of Tanzanian education and then discusses the respective responses of formal and nonformal education to crucial issues related to the goals of education, the amount of education provided, the kind of education provided, resources for education, financing of education, organization of education, and foreign influences on education. (Author/JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED144206

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Arthur L. Gillette

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS"

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEYOND THE NON-FORMAL FASHION:
TOWARDS EDUCATIONAL REVOLUTION
IN TANZANIA

ARTHUR LAVERY GILLETTE

Center for International Education
University of Massachusetts, Amherst, Massachusetts

Price: $ 5.50

EA 009 906

BEST COPY AVAILABLE

ⓒ 1977 by Arthur Lavery Gillette
All Rights Reserved

Printed in the United States of America

> "Present Tanzania society . . . has, despite its progressive policies, remained part of the neo-colonial system."
>
> National Christian Council
> of Tanzania, 1976

TABLE OF CONTENTS

Page
LIST OF TABLES viii

MAIN UNUSUAL ABBREVIATIONS USED ix

ACKNOWLEDGMENTS xi

INTRODUCTION 1

THE TANZANIAN CASE 25

CHAPTER I: FROM PAST TO PRESENT: THE BACKGROUND TO EDUCATIONAL REVOLUTION IN TANZANIA 27

CHAPTER II: THE GOALS OF EDUCATION 57

CHAPTER III: THE AMOUNT OF EDUCATION 81

CHAPTER IV: THE KIND OF EDUCATION 121

CHAPTER V: RESOURCES FOR EDUCATION 153

CHAPTER VI: FINANCING OF EDUCATION 191

CHAPTER VII: ORGANIZATION OF EDUCATION 231

CHAPTER VIII: FOREIGN INFLUENCES ON EDUCATION 269

SOME TENTATIVE CONCLUSIONS 295

BIBLIOGRAPHY 313

LIST OF TABLES

Page
TABLE I: MODELS OF DEVELOPMENT 22
TABLE II: ACCELERATORS AND BRAKES IN RESOURCES 188
TABLE III: COMPARATIVE COSTS PER HOUR OF INSTRUCTION 209
TABLE IV: CONVERGENCES AND DIVERGENCES 298
TABLE V: TWO KINDS OF EDUCATION 305

MAIN UNUSUAL ABBREVIATIONS USED

FAO: Food and Agriculture Organization of the United Nations

ILO: International Labor Organization

MATI: Ministry of Agriculture Training Institute

NUTA: National Union of Tanganyika Workers

RTC: Rural Training Center

TANU: Tanganyika African National Union

TAPA: Tanganyika African Parents Association

Unesco: United Nations Educational, Scientific and Cultural Organization

UNDP: United Nations Development Program

UWT: Union of Women of Tanzania

ACKNOWLEDGMENTS

In addition to my doctoral committee, whose members have provided guidance as invaluable as it was patient, a number of individuals and groups have my gratitude for their assistance in the preparation of this work.

Peter Higginson, Jeannie Moulton and Noa Vera Zanolli offered helpful comments on portions of the first draft. Budd Hall, John Hatch and Alfred Mdachi led me to bibliography that enriched the preparation and revision of that draft. The ideas and questions of my contemporaries and students at the School of Education's Center for International Education, of my students at the University of Paris VIII, of my colleagues at Unesco and of other people concerned with educational renewal met in various countries during recent years contributed to the generation and maturation of the ideas appearing in the following pages. Edward Hawley of *Africa Today*, Lê Thành Khôi of *Tiers Monde* and Paul Moorman of the *Times Educational Supplement* gave me the opportunity to publish and therefore refine some preliminary findings of my research on Tanzania. I am also indebted to Robin Massee for head-work and leg-work.

The rare combination of enthusiasm, commitment and realism among pupils, teachers and administrators encountered in Cuban educational programs in late 1971, and their undeniable achievements, convinced me that Third World countries can overcome educational (and other) problems, even under severely adverse conditions. More than anything else, perhaps, it was the acquisition of that conviction that made it possible--even necessary--for me to prepare this study.

INTRODUCTION

INTRODUCTION

Three Questions

"Education equals School"--this equation was described by Unesco's august International Commission on the Development of Education (Faure et al., 1972, pp. 82-83) as having long been "the most unquestioned dogma in education." Of late, however, "the school's importance in relation to other means of education . . . is not increasing, but diminishing," the Commission concluded. Attacks on the school dogma became perhaps the single most important feature of educational thinking and development, in industrialized as well as Third World countries, in the last decade.

Critiques ranged from the mild to the militant. Callaway (1972, pp. 18-19) draws a balanced picture, pointing both to the quantitative progress made in schooling and to the serious qualitative business left untended by formal education. A 1973 international seminar on literacy and adult education (Functional Literacy in the Context of Adult Education, 1973, p. 149) pointed out that basic education "cannot be achieved in African countries simply by the expansion of formal schooling." Harman (1974, pp. 31-33) generalizes this prediction of all developing countries, pointing to such major defects of formal education as inadequate facilities, inappropriate staff, inadapted curricula and pedagogy, all resulting in the "sorry picture" of high wastage rates.

More radical critics included--improbably--even educational officials of the countries concerned. Emerging from a 1972 Unicef seminar of such officials from eight West African countries (Enfance, Jeunesse, Femmes et

Plans de Développement, 1972, pp. 38-49) was a searing attack on the school system and, among other recommendations, a proposal that, pending a thoroughgoing change of the school, "first of all it should not be created where it does not already exist." This echoed--perhaps unintentionally--Illich's forthright demand (1971, p. 1) that "we must disestablish the school."

Naturally, the anti-school heretics had their own ideas about how education should respond more effectively to individual and social needs and aspirations, particularly in the context of Third World development. Having made a strong case for the existence of a "world educational crisis," Coombs (1968, p. 138) used the term "non-formal education" to cover a wide variety of programs outside the school that enable those with little or no schooling to "catch up, keep up and get ahead." Thanks largely to Coombs' own International Council for Educational Development, aided by such prestigious agencies as Unicef and the World Bank, the notion of non-formal education soon took hold in educational circles as a potential antidote to the ills of formal education.

Coombs' team (Coombs et al., 1973, pp. 26-27) stressed that one of the chief "tasks of non-formal education in developing countries" was to tackle "the unfinished business of the schools." In their research report to the World Bank (Coombs et al., 1974), they affirmed that appropriate non-formal education "is an indispensable and potent instrument of rural development." Indeed, for many dissatisfied but dedicated researchers and practitioners around the world, non-formal education took on something of the aura of a panacea. Evans and Smith (1973, p. 1)[1] call it simply "the light at the end of the tunnel."

---

[1] It should be pointed out that the present writer earlier shared a similar enthusiasm but was, by 1973, having serious doubts.

Interestingly, however, great care was generally taken to avoid giving the impression that non-formal education amounted to a direct assault on the formal educational establishment. Colletta (1975, p. 18) defines formal and non-formal education as "structurally unique modalities. . . ." The World Bank's Education Sector Paper (1974, p. 29) stresses that non-formal programs of basic education are "a supplement, not a rival, to the formal education system. . . ." Exhaustive study of non-formal programs in Africa led Diejomaoh and Sheffield to the conclusion (1972, p. 206) that they do not "eliminate or substitute for formal education on a large scale. . . . In most cases, non-formal education is seen as a complement to formal education." The Coombs team's report to the World Bank (Coombs et al., 1974, p. 235) formulated prescriptions as well as descriptions on this point. Non-formal education, it urges,

> . . . should not be seen as a menacing competitor of the formal system, or as an expedient substitute until formal schools can be adequately expanded, or as some would have it, as a welcome means for doing away altogether with formal education.

Many proponents of non-formal education seem, then, to have come a full--and paradoxical--circle. The fashionability of non-formal education grew from an analysis of the many and serious failings of school. But non-formal education is proposed as a separate, supplementary or complementary partner to the very school that its supporters so severely criticized.

To be sure, some critics do see non-formal education as a means of improving the school. Bansart de Fays assumes (1974, p. 188) that since formal education "cannot be brutally suppressed" it would be useful to have an out-of-school system that "would oblige it [schooling] to improve itself increasingly." Diejomaoh and Sheffield (1972, pp. 206-207) found that, in Africa, "the formal system, in its search for ways to become more relevant, is reaching beyond its traditional boundaries . . ." and experimenting, in a few places at least, with ideas from the non-formal sphere.

On the whole, however, what seems to have emerged is a model for educational development assuming not only the possibility but also the desirability of continued co-existence of formal and non-formal streams of education as separate entities. A 1972 Central American Conference on the family, childhood and youth made among its proposals on education, the following recommendation (Conferencia sobre la Familia . . ., 1973, p. 226): "That in educational policy priority be given to the extension of primary education . . . while developing a parallel programme of non-school . . . education." Unesco's 1972 world gathering of ministers on adult education made a similar recommendation (Third International Conference . . ., 1972, p. 39), urging that schooling "should be oriented toward preparing young people for post-school programmes of non-formal education." The two-pronged approach also received approval from the 1974 Dag Hammarskjöld Seminar (Education and Training and Alternatives . . ., 1974, pp. 6-7) which called for "a new deal in education [to be achieved] through the expansion of the formal system and the non-formal systems. . . ."

In general, then, from its original (and often radical) role of opponent to formal education, non-formal education seems to have evolved into a new (and reformist) role of handmaiden of formal education. It may even be suggested that the parallel use of formal and non-formal education often correlates with a reformist model of educational development that is espoused by many national governments and international (bi- and multilateral) aid agencies.

The model is reformist in the sense of "change-oriented" in that it hopes for gradual quantitative expansion and qualitative improvement of the school and also stresses the need to deal with the most urgent inadequacies of formal education through non-formal programs. It is, however, also reformist in the sense of "non-revolutionary" because, in the words of a Unesco document (Le Concept de l'Alphabetisation. . ., 1974, p. 27), although it seeks "to improve imported models" of schooling, it does not, "however, tamper with the fundamental principles of the Western models."

For a number of reasons, this reformist model--featuring the parallel but separate development of formal and non-formal education--seems unlikely to prove an adequate strategy for dealing with the many, serious and pressing educational problems faced by Third World nations.

In the first place, the very dichotomy between formal and non-formal education was, in virtually all of the Third World, an import from industrialized (colonial or imperial) nations. For example, the flowering of youth movements in Europe to fill educational gaps left by the school in the early years of the twentieth century, and of civic service corps at the time of the economic crisis of the 1930s, was a pattern replicated in overseas colonies and territories with little thought for adaptation, at the outset at least. Although efforts have been made of late to achieve greater relevance to local situations, Scouting and Guiding, the Junior Red Cross, YM and YWCA's, the Protestant Student Christian Movement, Young Catholic Workers, variations of the 4-H Club formula, and other out-of-school programs, organizations and movements remain on the whole essentially alien in spirit and origin--and still today often partly or mainly financed from abroad.

Gillette (1968, pp. 128-133) traces the export of voluntary work-camping from Europe and North America to Asia, Africa and Latin America during the early 1950s, which he terms "the period of evangelism." During the same post-war era, French organizations of _éducation populaire_ were busy implanting branches in African and other colonies, replicating the metropolitan model so closely that (to take but one example) Scouting in now-independent French-speaking countries of Africa is still sharply divided into Catholic, Protestant and secular groupings. The Coombs team (_Non-Formal Education for Rural Development_, 1973, pp. 50-51) concludes that imported models have sometimes done "poorly in the local social and cultural soil and survived, if at all, more as symbols than as vigorous realities." It is perhaps also significant that no major world organization of non-formal education--for adults or young people--has its headquarters elsewhere than in Europe or North America.

This is not to say that non-formal education programs have not emerged locally, in response to local needs, or that foreign aid has not helped such programs. Diejomaoh's and Sheffield's study, already referred to, describes numerous locally inspired initiatives in Africa. Another example is the _animation rurale_ method used in Morocco, Senegal, Niger and certain other countries. But on the whole, since formal education is an alien import and since non-formal education relates in one way or another to the school, the formal/non-formal pattern has strongly foreign overtones.

Secondly, non-formal education in any given country generally has a coverage that is both fragmented and limited. According to data collected by the Coombs group (_Non-Formal Education for Rural Development_, 1973, Appendix A) Kenya counts 28 programs sponsored by 16 bodies in the governmental, non-governmental and quasi-governmental sectors, and Sri Lanka has 27 programs run by 18 governmental and non-governmental sponsors.

Despite their great number (and consequent general lack of coordination), non-formal programs tend to reach only a very limited audience. Preuter (1973, pp. 3-4) points out that each program he studied in Africa "had to be very selective in its admission policies" and all programs, taken together, "fell far short of extending educational opportunity to all." His impression was that "the total effort was . . . spotty and fragmented." Of the 145 Third World programs surveyed by Coombs et al. (1973, Appendix B.4; information not available on 43 programs), 52 had less than 500 participants, 42 had between 500 and 20,000 participants and only eight had more than 20,000 participants.

Naturally, the goal of supporters of the non-formal fashion is to extend programs. Empirically, however, very few have gotten beyond the symbolic or experimental stage. Referring to civic services and other work-cum-training schemes, Gillette ("The Young Adolescent . . .," 1974, p. 25) says:

> Disappointingly, the last decade's skyrocketing enthusiasm and action . . . seems to have leveled off--even fallen off--before reaching a long-distance cruising altitude. Some schemes created in the early 1960s closed down as that decade came to an end. Others have seen their budgets and recruitment quotas soar, peak and decline--in the space of a few years. . . . The waters are now nearly still, if not yet stagnant. And the swimming looks, on occasion, suspiciously like floundering.

A fundamental reason for non-formal education's inability to move beyond generally limited impact (and this seems to be a third defect of the reformist model) is financial. The general assumption has been that non-formal education is cheaper than schooling. This is most probably not so in heavy-structure schemes like the Kenya National Youth Service (with its dependence on landmoving equipment) or the Ivory Coast television education project (with its recourse to a very sophisticated medium). On the other hand, Diejomaoh and Sheffield (1972, p. 204) report that although comparisons are difficult "an important conclusion that emerges from our survey is that non-formal education is less expensive per trainee than formal education."

Why, if it is cheaper than alternative means of extending and improving learning opportunities, has non-formal education not expanded much more rapidly in countries that have opted for the reformist model of educational development? One might expect that economies of scale would cut per capita expenditure in the dearer non-formal schemes, and reduce spending of low-cost programs to almost nil.

Gillette ("The Ecuador Non-Formal Education Project," 1974, p. 135) suggests one answer. "In economic terms, the co-existence of two education systems--one [the formal] ill-adapted and change-resistant, the other [non-formal] relevant and change-oriented--would require a highly irrational allocation of limited resources." It does seem improbable that poor countries that are already spending as much as 20% of national budgets e.g. to offer primary education to as few as 15% of school age children, are simply unwilling to make the kind of investment necessary for the massive expansion of even inexpensive non-formal education. Already in 1968 the Unesco Conference of African Ministers of Education, at Nairobi, declared (paraphrased in L'Education en Afrique . . . , 1975, p. 22) that "educational spending in their countries was approaching a maximum and could not be further increased without jeopardizing the indispensible development of other sectors." The only way to increase national spending on non-formal education would be to decrease spending on formal education--a shift of priorities that reformist model countries seem simply unwilling to contemplate, let alone effect.

Why is this so, given the much touted advantages of non-formal education? It seems that in many cases the school dogma referred to above still holds sway. In some cases, it may even be rigidifying. According to Foster (1969, p. 82):

> To be sure, there have been sporadic attempts at the "Africanization" of curriculum content and a good deal of vague discussion over the need to 'adapt educational systems to African needs and realities' but, for all this, most nations have been content to adhere to the structure and content of schooling bequeathed to them by the former colonial metropole. Indeed, in some territories the similarities between metropolitan and post-colonial systems have increased rather than diminished since independence.

Leaders of countries opting for the reformist model want to have their educational cake and eat it too. President Senghor of Senegal (where the French baccalauréat still sanctions secondary education) recently told a Le Monde reporter (Fontaine, 1973, p. 12) that

> . . . he is very proud of the 1,500 bacheliers who graduated this year from the lycées of his country and of the four [Senegalese] students who passed the mathematics agrégation--the French agrégation because, he told me, he does not want diplomas 'on the cheap.'

Although doubtless unintentionally, the phrase "on the cheap" was a slap in the face of both the Senegalese and the foreign educational innovators responsible for the three successive waves of non-formal innovation which that country is widely known for: l'animation rurale, rural radio clubs and the l'enseignement moyen pratique.

Such is the extreme point of contradiction that the reformist strategy of education can reach--and the contradiction does not concern education alone, but the whole reformist model of socio-economic development which the educational strategy is meant to serve. The dichotomy between formal education and non-formal education in the reformist strategy reflects, indeed, the socio-economic situation as a whole. According to Gillette and Spaulding (1975, p. 160) these are often

> . . . countries where 80% to 90% of the population is rural, illiterate, often propertyless and without access to basic social services--while 10% to 20% is urban, educated in largely alien schools, owns or manages the means of production and consumes according to a Western-inspired standard. . . .

According to these authors (1975, p. 156), it may have often been less a sense of altruism than conservatism--"their survival instinct"--that led the leaders of reformist countries

> . . . to believe that literacy action [one might add: and all forms of non-formal education designed for the little- or non-schooled] would help overcome sharpening dysfunctionalities in their societies, thereby enabling them to maintain power.

Seen in the light of the continued role of formal education in maintaining the power of the minority dominant elite, the "minimal essential learning needs" non-formal education is expected to meet among the rest of the population (Coombs et al., 1973, pp. 13-17) take on a somber hue. For Salamé (1974, pp. 414-415) the reformists' provision of basic work-oriented literacy skills is meant to "enable he who is dying to obtain bread, but in order better to provide the others with cake."

In the light of all the inadequacies of the reformist educational model just outlined, it is not surprising that--even in relatively wealthy countries experimenting with it like Brazil and Indonesia--non-formal education has not written a single national success story in the Third World. The separate development of formal and non-formal education is a strategy that has yet to show it can solve the educational problems of the Third World. Perhaps unwittingly, a recent Unesco publication on *Edu-*

cation in a Rural Environment came to a similar conclusion about the reformist approach to educational development (1974, p. 16):

> Piecemeal reforms are no longer enough: it has become a matter of urgency to carry out a thorough review of the educational system, and to ensure that education makes a real contribution to rural [and, one may add, all] development.

What are the alternatives? A number of researchers have referred to the desirability and probability of some degree of convergence between formal and non-formal education. As early as 1968, Coombs (1968, p. 144) pointed to the need "to break down the wall between them." The Coombs team (Coombs et al., 1973, p. 37) included among important outstanding issues at the end of their research the following "open question:"

> What are the possibilities for developing new hybrids of formal and non-formal education that could do a larger and more effective job than the sum of the two operating separately, as they do today?

FAO (Considerations for the Formulation . . ., 1972, p. 16) was more affirmative and urged a strategy of "out-of-school education in three progressive stages." In the first, out-of-school education was to "complement formal education." The aim of the second was "to create a cooperative joint education," including organic links between schooling and non-formal programs. The third stage was "to evolve a totally new educational process (where the distinction between formal and non-formal education disappears . . .)."

In certain countries with the reformist strategy, it seems that--in limited and isolated situations--steps have been taken in this direction. Diejomaoh and Sheffield point out that (1972, pp. 206-207) "some formal secondary schools are experimenting with ideas developed in non-formal education projects and even merging with them." They cite the Mayflower School in Nigeria as an example. Asking "are you going formal or non-formal," Preuter (1973, pp. 1, 3 and 6) found that "the most successful of these schools and non-formal projects [he visited in Africa] had some common characteristics." In conclusion, he states that he would choose "to garb myself in neither 'formal' nor 'informal' dress but rather to develop a 'habit' which would incorporate the best components of each."

If the convergence or merger these sources have seen or hoped for on the horizon has not taken place on a massive scale in countries with a reformist educational strategy, it is (as suggested above) possibly because that strategy seems to serve a broader reformist development strategy designed to help an exploiting elite to maintain power through, among other things, continued use of a fundamentally inflexible system of formal education. But what happens in a revolutionary context, where exploiting elite power is overthrown? What new relationships between formal and non-formal education emerge as they are harnessed to bring about radical socio-economic change? Do they continue to develop as essentially separate entities? Do they tend to converge, with formal education taking on certain non-formal characteristics and/or vice versa? Or does the distinction between them disappear altogether, giving way to an entirely new educational system that, as Preuter hopes, combines the best of both previous streams?

Examining the Cuban case, Gillette (Cuba's Educational Revolution, 1972, p. 31) found a two-phase development. First, the revolutionary educational strategy rapidly expanded various kinds of non-formal programs. They were, "in effect saying that all students should have the opportunity to benefit from the advantages of out-of-school activities." Then, toward the end of the 1960s, came the establishment and spread of the *escuela secundaria básica en el campo*--the school in the countryside.

> By creating the school in the countryside, which incorporates many out-of-school features, the [revolutionary strategy] was serving notice that a student's secondary education would not be considered complete unless he or she had *effectively benefited* from the advantages of out-of-school programmes.

In "Cuba's School in the Countryside . . ." (1972, p. 55) Gillette indicates that problems still exist in the school in the countryside. Classroom work still resembles traditional classroom work although it takes place under the same roof and with the same participants as non-formal aspects of the program. He concludes:

> If, however, this and other problems can be solved, the combination of formal and non-formal education in the 'school in the countryside' may well be judged to have the chief virtues of many hybrids: it will be hardier, more productive, and better suited to ambient conditions than either of the original strains.[2]

This evidence from Cuba is too slim to permit the formulation of a hypothesis, much less any hard and fast predictive statement. But it does suggest that a political revolution may open the door to radically new relationships between formal and non-formal education, and thereby enable education better to contribute to socio-economic development. Examination of the relationships between formal and non-formal education as a whole at the national level in a revolutionary country should, in fact, (a) yield insights into the process of educational and broader socio-economic change in that country, and (b) point to productive directions for innovative action and research by educationists and other development workers in the Third World. To undertake such an examination is the purpose of this study.

---

[2] A case could be made for the thesis that hybridization is now being implemented at virtually all levels of Cuban education.

Three elements come into play here. The first, clearly, is the relationship between formal and non-formal education per se, and pertains particularly to the issue of whether formal or non-formal characteristics will tend to dominate in these relationships. A first guiding question will, then, be:

> What relationships between formal and non-formal education seem to be emerging in the country studied, and what are the chief characteristics of these relationships?

Secondly, it is evident from the above discussion that the examination should focus not on education solely, but also on the relationship between education, on one hand, and the models of socio-economic development served by education, on the other. A second guiding question will, then, be:

> What models of socio-economic development seem to be reflected in the relationships between formal and non-formal education?

Finally, conclusions reached about the relationship of formal and non-formal education--and about the models of socio-economic development reflected in that relationship--are liable to have implications concerning the state of the revolution itself. Consequently, the third guiding question will be:

> More broadly, what do the answers to the first two questions seem to suggest about the contemporary evolution of the revolution in the country studied?

Methodology

The country chosen for examination is Tanzania. This choice has been made according to three criteria. First, Tanzania has adopted a self-proclaimed revolutionary strategy of socio-economic development (embodied in particular in the 1967 *Arusha Declaration*), and is generally considered by external observers--be they sympathetic, neutral or critical--to be in the throes of genuine and massive socio-economic change. It is not by pure coincidence that the Zurich Third World Working Group (cf. *Tansania oder die Andere Entwicklung*, 1972) and the Dag Hammarskjöld Foundation of Sweden (cf. *Another Development*, 1975) arrived independently at a description of the Tanzanian strategy as distinctive, alternative--*other*. In sum, this study will not attempt to determine whether Tanzania is undergoing a socio-economic revolution. It assumes that such a revolution is taking place and that, therefore, one of its features (if the working proposition is correct) will be a merger of formal and non-formal education.

Secondly, Tanzania has been chosen because, to date, no comprehensive study of the country's revolutionary educational praxis has been undertaken, to the knowledge of the present author, or at least none has been made widely available. The literature is replete with titles referring, in comprehensive terms, to *intentions*, particularly as spelled out in the 1967 declaration on *Education for Self-Reliance*. In this connection mention may be made, among many others, of Cameron and Dodd (1970), Eliufoo (1969), Hatch (J.D.)(1973), Lewis et al. (1971), Resnick (1971) and Zanolli (1971). But, as Giltrow has pointed out (1974, p. 53), such studies tend to "lack any evaluation of what has happened since *Education for Self-Reliance* appeared in 1967 because they come too close on the heels of its publication. We must await another policy study to assess the operational effects of that document."

Sectoral, rather than comprehensive, studies have been done on the implementation of the self-reliance policy. Akwenye (1975) and Mbilinyi (1973) have looked at primary education, Grabe (1972) examined education related to the cooperative movement, Hall (both 1974 references and 1975) and Hall and Mhaiki (1972) have documented adult education thoroughly, Viscusi (1971) studied literacy work, albeit rather early in its development after the proclamation of the self-reliance policy, and Ishumi (1973, 1974) has examined the University.

To the extent that (relatively) recent intersectoral examination of Tanzanian education has been published, it has taken the form of overview chapters or articles, which are only superficially (or impressionistically) comprehensive. This is the case of Gillette ("L'Education en Tanzanie . . .," 1975), Muncie (1973) and Vacchi (1973).

It appears that no study--comprehensive or not, recent or less so--has focused specifically on the relationships between formal and nonformal education in the framework of the implementation of the policy of education for self-reliance, although Lewis et al. (1971) do make passing references to the subject.

Despite this lack of material on the specific topic of the present study, the third criterion according to which Tanzania was selected was the availability of sufficient information that is both timely (pertaining to theory and practice of the period from the declaration on Education for Self-Reliance to date) and of at least partial relevance to the themes to be studied. The most complete bibliography on Tanzania readily available, that of Hundsdörfer and Küper (1974), lists more than 350 entries under the heading of education. Some refer to the pre-1967 period; others are so specific as to be of little help in describing and analyzing the overall picture; others still appear to be both timely and useful but have proven unobtainable.

Nevertheless, it has been possible to consult nearly a hundred items on education in Tanzania (not all listed by Hundsdörfer and Küper) deemed to have sufficient internal and external validity, and to be sufficiently timely, to constitute at very least an acceptable information base. Of these references the vast majority emanate directly from the Tanzanian Government or Government-related institutions (e.g., the Institute of Adult Education), from international agencies directly involved in Tanzanian education (e.g., Unesco) or from research projects carried out on site (e.g., De Jongh, Dubbledam, Grabe, Lewis et al., Varkevisser and Zanolli). The ratio of primary to secondary sources is about five to one.

The availability of an acceptable information base is all the more crucial since this study derives almost exclusively from documents, supplemented only by conversations with Tanzanian and foreign researchers and practitioners. It proved impossible to carry out research in Tanzania itself.

The methodology follows a systematic examination of highlights and trends in the respective responses of formal and non-formal education in seven crucial issue areas. A "highlight" is construed here to be a major development, and a "trend" is the evolution of a highlight, particularly as regards changes occurring since the promulgation of the self-reliance policy in 1967. The crucial issue areas have been chosen so as to facilitate the piecing together of as broad a picture of Tanzanian principles and practice as possible. (Cf. section on Organization, below).

Definitions

Two clusters of terms used in this study require clarification at the outset. The first concerns the distinction between formal and non-formal education. Upon first using the term "non-formal," Coombs (1968, p. 138) referred to a "bewildering assortment" of activities that constituted "this shadowy 'other system' of education." Callaway (1972, p. 20) points out that "non-formal education" is nearly synonymous with the term used since the late 1950s by Unesco, "out-of-school education." Diejomaoh and Sheffield (1972, p. xi) also indicate that "non-formal education . . . is roughly synonymous with the more widely used term 'out-of-school education.' . . ."

Curiously, the Coombs team uses rather different definitions almost simultaneously. In October 1973 (Coombs et al., 1973, p. 11) it defines

> . . . non-formal education as any organized activity outside the established formal system--whether operating separately or as an important feature of some broader activity--that is intended to serve identifiable learning clienteles and learning objectives.

This definition roughly parallels those mentioned above in its polar approach to what is inside and outside the school. But already in February of 1973 (Non-Formal Education for Rural Development, 1973, p. 11) the Coombs group had made a further distinction in the out-of-school sphere between informal and non-formal education, the difference being essentially that informal education is unorganized, unsystematic and generally unintentional--it is not treated as an educational enterprise. Ingle (1974, p. 3) and Colletta (1975, pp. 2-3) make a similar three-way distinction, as does Smith's earlier landmark work (1972), which distinguishes between formal, non-formal and incidental education according to a sophisticated grid based on ten major variables.

The purposes of this study, and the somewhat varying quality of the information base, make it neither desirable nor (perhaps) possible to use the sophisticated Smith grid. A rougher distinction is adopted according to primarily structural criteria. Formal education is used to mean the primary and secondary school system and university instruction as well as teacher training. Non-formal education is defined as by Coombs et al. (1973, p. 11) quoted above.

Secondly, reference is made throughout this study to two models of socio-economic development, the Western urban-oriented and "modernizing" model and the self-reliant, ujamaa socialist model. The first corresponds roughly to the reformist approach to development referred to above, while the second is the specifically Tanzanian revolutionary approach to development (as outlined particularly in the Arusha Declaration of 1967). Very schematically, and at the risk of oversimplifying, major features of the goals and practices of these models may be summarized as follows in Table 1.

Organization

This study is divided into three parts. The present Introduction constitutes the first part. The second is a case study of education in Tanzania. It begins with an outline of education in the territory of what

TABLE I

MODELS OF DEVELOPMENT

URBAN-ORIENTED "MODERNIZATION"	*UJAMAA* SOCIALISM
Western origin, internationally current	Specifically Tanzanian
Development is urban-based and "extended" to the countryside.	Development originates in the countryside.
Priority to extractive (and some manufacturing) industry, and agriculture for export	Priority to agriculture for national consumption (and export)
Capitalist mode of production (private enterprise and/or state capitalism)	Socialist mode of production (some state ownership; cooperative village level agriculture)
Capital intensive	Labor intensive
Exogenous: ideological, economic and technological dependence	Endogenous: self-reliance
Prime beneficiaries of development: oligarchic and/or technocratic elite; growing middle class	Prime beneficiaries of development: rural masses

is now Tanzania[3] from its pre-European origins until 1967, when the declaration on Education for Self-Reliance was issued. This outline covers successively traditional African education, Islamic education, Western education during the early missionary period, the German period and the British period, and the post-Independence Western period of Tanzanian education.

The case study then examines and compares the respective responses of formal and non-formal education to crucial issues in seven areas, and analyzes the similarities and dissimilarities of their approaches. The areas are: goals of education (their existence, origins, collective vs. individualistic orientation and meaning with regard to knowledge); the amount of education (numbers and kinds of learners, lengths and sequences of learning); the kind of education (curricula, methods, language problems); resources for education (human and material resources, plant); financing of education (national expenditure and sources); organization of education (planning and evaluation, distribution of responsibility, coordination); and foreign influences on education (chief sources and recipient sectors of aid, external influences on concepts and policies).

The final section offers some tentative conclusions in answer to the three questions asked in the first section of this Introduction.

---

[3] Reference is made throughout this study only to the mainland component of the United Republic of Tanzania, given the complete educational autonomy (and different approach) of Zanzibar.

THE TANZANIAN CASE

CHAPTER I

FROM PAST TO PRESENT: THE BACKGROUND TO EDUCATIONAL REVOLUTION IN TANZANIA

To understand the reasons leading to the adoption of the policy of education for self-reliance, as well as certain prime factors that are conditioning its implementation (e.g., the previous organization of education; parent, pupil and teacher values regarding education; Tanzanian attitudes towards foreign educational influences), it is indispensable to review and interpret the development of education in Tanzania from pre-colonial times to the eve of the option for the apparently revolutionary strategy of education for self-reliance. For this purpose, the history of Tanzanian education may be broken down into four major periods: traditional African education prior to foreign penetration; Islamic education; Western penetration (the missionary phase, German colonization, British domination); and early Independence (to 1967).

Traditional African Education

Cameron and Dodd have pointed out (1970, p. 47) that:

> It is a fallacy to believe that the early [European] pioneers [in the land now become Tanzania] moved into a complete educational vacuum. Every society has its educational system, if only to the extent that it is its concern to pass on to the younger generation the values and beliefs which give it an identity and preserve its existence.

Great care must be taken in attempting to be more specific about traditional African education in Tanzania, of course. There is no contemporary written record of its nature and evolution. Also, there were considerable differences among the various groups of Bantu peoples descended from those who first settled the area that is today Tanzania about two millennia ago. Keeping in mind the conjectural character of what follows, however, it does seem possible to indicate certain major characteristics of traditional education that were quite possibly fairly widespread in the area. This is done chiefly by a retrospective projection of recent anthropological descriptions (particularly Varkevisser, 1973, and Zanolli, 1971) of non-Western education's setting, timing, audience, contents, agents and methods.

The setting of traditional education seems to have been the setting of life itself, gradually expanding, as the child grew, from the family cluster of huts and fields to the compounds of immediate neighbors to those of members of the same clan living farther afield (Zanolli, 1971, p. 39). There was, then, probably no specific locale of education since education could and did take place wherever the child happened to find him or herself.

The same integration of learning and life appears to have characterized the timing of education. In the long-term perspective, according to Cameron and Dodd (1970, p. 48), "education was . . . a lifelong process whereby a person [prepared for and] progressed through predetermined stages of gradation from life to death." From a shorter term point of view, education seems generally to have followed and grown from the life cycle of family and clan, varying with planting and harvesting, rainy seasons and dry. Since nearly all human activity was viewed as having educational potential, education required in Zanolli's observation (1971, p. 36) "no fixed timetable for each day."

Content of traditional education varied with age and sex, but appears generally to have been determined for all by the actual functions to be fulfilled in society, immediately and not only--or even predominantly--in the future. First, education "was vocational in that boys were prepared to become warriors as well as hunters, fishermen or farmers, and the girls to perform domestic and agricultural duties with strong emphasis on their roles as future wives and mothers" (Cameron and Dodd, 1970, pp. 48-49). There was probably little if any time lag between the acquisition and use of most vocational skills since in Zanolli's observation of current African socialization (1971, p. 38), "children are fully incorporated into the household and do chores as soon as their strength permits" while in fields and other work settings "there is hardly a grown-up task which . . . in relation to their age and strength [learners] would not be allowed to perform."

Stress was apparently also placed on inculcating the norms of "correct behaviour, including sexual behaviour" (Cameron and Dodd, 1970, p. 49) according to four main precepts (Zanolli, 1971, p. 38): good manners (ababu), good character (tabia), obedience (utii), and respect, especially for elders and superiors (kuheshima watu). Civic education was also important, and instruction was provided in the clan's religion, history and organization. Here, again, functionality of content prevailed. Thus, social self-management was learned in peer groups, which Varkevisser calls (1973, p. 264) "training grounds for novices in social organization" where, in the words of one of her informants, young people "learn to work collectively [and] practice speaking in public and learn the rules which govern behaviour in adult neighborhood organizations." Generally, it seems that since children and young people were accorded considerable responsibility they had to learn its exercise. For Zanolli (1971, p. 38), "they learn to make certain decisions. . . . They are looked upon as small adults and are expected to act accordingly."

The audience of traditional education may be said to have been determined by the social relationships within traditional society (the superstructure), which in turn were shaped by the ownership and use of the means of production (the infrastructure). This seems to have been a system in which the major means of production were communally owned and their fruits shared, if only to ensure survival of the community living in a subsistence economy. Although there existed a certain hierarchy (e.g., according to sex and age), it appears not to have been at the expense of widespread marginalization or starvation of large sectors of the population. It is quite possible that the situation paralleled that in other parts of Africa (described in Bourquin, Diallo and Patané, 1974, p. 10) where:

> . . . in the primitive village, the man, woman, elder, child, the robust and weak, each worked according to his physical possibilities and to the limit of his genius. The product of this labor was organically collective and nobody owed anything to anyone else. In this setting, interpersonal relations were established automatically on an egalitarian basis. . . .

According to Nyerere (quoted in Hall and Mhaiki, 1972, p. X), "in our traditional African society [in Tanzania], we were individuals in a community. We took care of the community and the community took care of us. We neither needed nor desired to exploit our brothers."

The primary function of traditional education in this setting seems, then, to have been to ensure survival of the community more than to select an elite. Consequently, since survival depended on all, all (girls and boys) had to be educated--and all seem to have been educated, at least minimally.

There were apparently no full-time professional teachers in the traditional African education system since nearly all members of society acted as educational agents. Elsewhere in Africa, according to Bourquin, Diallo and Patané (1974, p. 11), "the child is constantly before the whole group and it is from the whole group that he receives his training. [Thus] every woman old enough to be a mother is called mama." Zanolli (1971, p. 37) found that in Tanzania, "The persons who have most contact with children are those responsible for their upbringing." This teaching force included parents (fathers assuming special responsibility for sons and mothers for daughters) and other adults. Equally important, apparently, was the educational role of children and young people (siblings and peers). Infants seem to have been cared for by siblings who, although older, were barely out of infancy themselves. With early adolescence the educational functions (among others, including social, cultural and productive) of autonomous peer groupings assumed special influence. Between the ages of ten and sixteen, boys and girls joined in separate youth societies (the kiyanda, in Sukumaland, for instance--cf. Varkevisser, 1973), which in turn prepared them for accession to similar associations of young adults (e.g., the Sukuma kisumba).

The pedagogy of traditional African education was, in part, oral. Ideas and information were passed on in casual conversation around the household, in the fields or wherever the need occurred to transmit notions or facts unknown or unclear to the learner. Oral pedagogy also made widespread use of "moral stories and illustrative proverbs" (Cameron and Dodd, 1970, p. 49), as well as singing. Far from being limited to passive listening, however, the learner learned actively, beginning in early childhood with games imitating behavior to be acquired.[1] Active teaching methods also included an increasing share of actual task performance.

How can traditional education be interpreted? While recognizing its existence as a coherent and successful means of instruction and socialization, certain recent European authors have judged traditional African education harshly. Cameron and Dodd (1970, pp. 49-50) term it "personal conditioning [and] education in conformity. . . . In a society where behavior is prescribed and transmitted, knowledge is not to be questioned. . . . Where there is an approved formula for everything, the hypothesis has no place." Zanolli also stresses the conformist nature of character traits produced (1971, p. 39):

> It is not considered proper to excel. . . . To work hard and be obedient is accepted, but extra effort resulting in a larger field or a greater crop yield than is necessary for the family's subsistence is frowned upon. The neighbors become jealous and destroy one's seed or steal one's cabbage.

Without challenging the factual basis of such judgments, one may question the applicability of the value systems from which they proceed (Western industrial, individualistic) to the situation which they criticize (African, pre-industrial, communal). Is it appropriate or useful to castigate a society that had known continuity during several centuries for not being change-oriented? To disparage the collective orientation of a society in which, given the overriding need to ensure group subsistence and survival, individual experimentation and innovation are deemed dangerous?

For the purposes of this work, it would seem wiser to adopt relativistic criteria, that is: to judge traditional education in Tanzania on its own terms and in its own time, not from the outside and retrospectively. From this perspective, one cannot but be struck by a number of salient particularities.

---

[1] It is intriguing to note in this context that our "school" comes from the Greek word skholé, originally meaning "leisure."

First, education was largely undifferentiated from other spheres of human activity. Education seems on the whole not to have been limited to a prescribed locale, but took place more or less anywhere, everywhere. Education did not take place at a special time of day or life, but almost all day and almost every day throughout life. Education was not imparted by professional personnel; rather, almost all members of society had at least some educational function, including the very young, with the result that many people were simultaneously educating and being educated.

Secondly, education tended to be relevant. The skills, behavior and attitudes taught were more consistent than not with the vocational, personal, social and civic needs of the learners and of society.

Thirdly, traditional education seems to have been functional. The curriculum and pedagogy--what was taught and the way it was taught--were on the whole such that learning could be and was immediately and usefully applied.

Finally, education seems to have been community oriented. A degree of hierarchy did exist, but apparently did not inhibit the availability--indeed the necessity--of minimal education for each as a means of ensuring the survival of all.

I do not intend to paint an idyllic picture of traditional African society, or of the education system it used to perpetuate itself. Both doubtless had many faults; even a culturally relativistic analysis may, for instance, deplore the severe corporal punishment meted out to disobedient or otherwise deviant learners. On the other hand, it does appear that traditional education, inextricably intertwined with everyday life--undifferentiated, relevant, functional and community-oriented--was in, on the whole, harmony with society. Education functioned more than less in symbiosis with society, each deriving sustenance from--and sustaining--the other.

This organic integration of education and society may explain in part the stubborn resilience until today of the traditional system which, despite a century of imperialist cultural aggression in various guises, has survived until now. Cameron and Dodd (1970, p. 50) warn that "The persistence today of indigenous educational processes should not be underestimated. . . ." and point out (pp. 232-233) that "Formal education [by the missions and successive colonial governments] never completely replaced the traditional forms of education. [Formal education] is only the tip of the iceberg." The continuing influence of the "iceberg" itself was pointed out by Zanolli (1971, p. 37):

> The majority of the pupils interviewed in Upper Primary School told us that their parents had taught them the most. This suggests that . . . the children consider the general rules of behavior learned at home and their daily tasks more important than the subjects they learn at school.

More important than school or not, it is clear that the content and vehicles (the important educating functions of youth societies as well as parents) of traditional education are still very much alive.

Islamic Education

The spread of Islam, and of its Koranic schools, reached the coast of what is today Tanzania soon after 700 A.D. Thus arrived the first wave of what Cameron and Dodd (1970, p. 50) call "formal non-indigenous education."[2] Islamic education was formal in that it: took place in a distinct and readily identifiable institution (the Koranic school) and at a specific time of day and life (prescribed hours of instruction focused on the young); followed a pre-determined curriculum (religious instruction, plus--for many, if not all, pupils--the rudiments of the three R's); was dispensed by professional teachers; and favored teaching methods (especially memorization) recognizable as a pedagogy particular unto itself. Islamic education was non-indigenous in that, in addition to being formal, it served as the vehicle for the introduction of an alien religion, language and--to some degree--civilization, imported by foreigners, the Arab traders and slavers.

Given its formal and non-indigenous character, Islamic education might be thought to have been the antithesis of traditional African education described above. One may surmise that there was conflict, but for two reasons history would not seem to bear out a conclusion that Islamic penetration destroyed traditional African society, or that, concomitantly, the Koranic school heralded the disruption or downfall of traditional education.

First, the nature of Islamic penetration of East Africa was different from its conquests elsewhere. This was not a holy war, like the jihad that swept men and institutions from its path as it unfurled across the Maghreb and into Spain, for example. Rather, Islam seems to have arrived on Tanzania's shores in the boats and purses of merchants, a commercial as much as an ideological enterprise. It is not surprising then that, while indicating that Islamic education involved the opening of many doors through the dissemination of a "great and international" religion reflecting "a very old civilization," Cameron and Dodd (1970, p. 50) affirm that the Koranic school "was and still is devoted almost exclusively to learning the Koran and the fundamental tenets of Islam." It did not, for example, offer instruction in such important spheres as vocational or specifically civic education.

---

[2] "Formal" in the sense that the Koranic school was a distinct institution for learning a pre-determined curriculum. Paradoxically, agencies such as Unesco and the World Bank have recently begun to show interest in Koranic schools in Morocco (and their Coptic counterparts in Ethiopia) as non-formal institutions of education.

Secondly, on the whole Islam did not come as a penetration of settlement. Unlike Kairouan and Rabat, which became the capitals of Islamic kingdoms largely peopled by Arab colonists, a Tanzanian Islamic city like Kilwa[3] remained an outpost of trade and communication with a hinterland that, socially and politically, remained essentially African.

The extent of Islamic influence being limited to the coast and major inland arteries, the number of pupils reached by Koranic schools was never very great. Cameron and Dodd estimate that although colonial "peace" enabled Koranic schools to continue after the arrival of European imperialism, there were at the peak period of expansion (1924) no more than 700 schools with 8,000 pupils, four fifths of whom were in the coastal areas. The number is deemed to have "steadily increased" thereafter, probably due more, however, to the influx of Asian Moslem traders and clerks than to a revival of Islamic education among Tanzanians.

---

[3] Davidson (1959, p. 227) calls medieval Kilwa the "greatest of these [East African] coastal markets and entrepots . . . milking [inland African and seagoing Arab] buyers and sellers alike of fat customs dues and tariffs. . . ."

Limited in nature and extent, Islamic penetration of Tanzania did not overthrow traditional African society and its Koranic schools did not replace traditional African education. It is not to minimize Islam's influence to say that its long-run impact on Tanzania was one of fusion rather than confrontation. Symbolically, the resulting coastal language and culture, although basically African, are known by an Arab-root name: Swahili.[4] This then was the situation as it can be reconstructed on the arrival of the first European educators in Tanzania just over a century ago: a Bantu hinterland with traditional African education--undifferentiated, relevant, functional and egalitarian--intact, and more cosmopolitan but still essentially African coastal culture with traditional African education for the vast majority and Koranic education for a tiny minority.

Western Education

The Early Missionaries

If the influence of Islamic education was limited in extent and kind, the first wave of European penetration--the missionaries--announced an educational imperialism whose design was radically different: total domination, both geo-political and mental.

Spearheaded by the Protestant Church Missionary Society around 1870, which was followed in 1878 by the Catholic Holy Ghost Fathers and

---

[4] From the Arabic sahel, meaning "coast." This culture was thought until recently to have been non-African. But now specialists are changing their minds. The archeologist Gervase Mathew told Davidson (1959, p. 210) that "the history of the coast of the medieval period is more easily intelligible if it was the history of an African culture gradually Islamised than if it is merely the history of Islamic colonies from the Persian Gulf."

White Fathers, the European missionary drive to convert and educate Africans moved rapidly inland, founding for example the first full-fledged school in Sukumaland in about 1890. So great was their zeal to ensure ever-greater enrolments that the missionaries had on occasion recourse to such measures as encouraging local rulers to impose fines on parents whose children did not attend the new schools. Such practices were hardly welcomed by the populations affected, and gave rise to various forms of resistance. They almost certainly contributed to the armed opposition to German occupation, which was only finally crushed in 1898. But they also elicited subtler forms of resistance such as a proverb quoted by Dubbledam (1970, p. 9) referring to a village where the above-mentioned fine system was used: "To live in Nasa is to fear the school."

Despite opposition, the missionaries made considerable and rapid progress toward their aim of quantitative expansion. According to Cameron and Dodd (1970, p. 55) there were, by the turn of the century, 600 mission schools in Tanganyika with 50,000 pupils. By the outbreak of the First World War, in 1914, and "allowing for what were short-lived bible classes and Sunday schools,' the missions claimed 1,000 schools with an enrolment of 150,000. The educational influence of the missionaries also overflowed the confines of their own system since, despite disagreements with the German government, they were also allowed to teach in the latter's schools.

With regard to the kind of education imparted, the early missionary efforts appeared to have a semblance of respect for African traditions. Teaching took place in local vernaculars and schools were open to girls as well as boys, for instance. In retrospect, however, such apparent adaptability seems to have been founded on ulterior motives, and to have been relevance and functionality can hardly be accepted as authentic since they reflect not an objective appreciation of the situation and aspirations of the Africans but a prescription, made from without by alien forces basing themselves on alien criteria, for what the Africans should be and want.

What may be said of the apparent egalitarianism of missionary education? Although often working through and manipulating the hierarchical leaders of traditional African society, and while German government education focused on chiefs' sons, the missionaries opened their doors to all. Many surely thought they were merely keeping faith with the Christian injunction to serve the humble. But another motivation was probably equally strong: a mistrust of, and a desire to undermine, the hierarchy that was viewed as the main bastion of "pagan" values, social structure and education. Thus the apparent egalitarianism of missionary education may be judged to have been largely a tactic designed to help achieve the strategy of destroying traditional society.

African resistance to the missionaries' grand design of total geo-political and mental domination was a salient feature of the educational history of Tanganyika in the last quarter of the nineteenth century. And no wonder, since for all Africans concerned with preserving their society and their education, "to live in Nasa [was] to fear the school."

The German Period

The partition of 1885 gave Tanganyika to Germany, which ruled it until 1919, when it was defeated in the First World War, part of which was fought on Tanganyikan territory. At first, according to Cameron and Dodd (1970, p. 55) "education for Africans was farthest from their [the German short-lived. Vernaculars were used both to ensure transmission of the schools' evangelical message (which hardly grew from cultural sensitivity to African values) and to combat the influence of the Swahili-speaking coast people used by the Germans to implant their administration. As for co-education, it was soon abandoned for fear of the "immorality" it might lead to.

The content of education--and the implications of that content--were openly and flagrantly alien. In Dubbledam's account (1970, p. 10), the missionaries concentrated at first on teaching their pupils "reading, writing and religion so that . . . they could do evangelistic work." But Cameron and Dodd (1970, p. 54) point to the broader meaning of the curriculum:

> . . . the early missionaries not only propagated the Gospel, and in so doing taught the three R's, but sought to inculcate the moral and social values of the civilization they represented and in which they, like their secular contemporaries, had supreme and unquestioning confidence.

In short, the educational efforts of the early missionaries marked a sharp departure from the practices of Islamic education, and simultaneously, sowed the seeds of a series of contradictions that would only reach full bloom later. For the first time, the notion of a differentiated education--dispensed by a special institution in a special time and special place by a special staff--was given widespread application in Tanzania as an alternative to and assault on traditional, undifferentiated African education.

Doubtless, the missionaries thought their education was relevant--consistent with the learners' "need" to be evangelized--and functional--enabling the learner to evangelize in turn. But these interpretations of authorities'] minds." But they soon realized that education could play a crucial role in consolidating and maintaining their hold on the country and education came to form an important part of their colonial policy. Symbolic of the impact of German education is the appearance in Tanganyika Swahili--which had no word for "school" since traditional education was not, as already explained, equivalent to schooling--of the noun shule.[5]

For Cameron and Dodd, and, to a lesser extent, Dubbledam, the chief features of educational history in the German period were the issues that opposed the government and the missionaries.

In the previous section, it was pointed out that the missionaries favored vernacular-language instruction for all, and concentrated their efforts in the interior, while the German government stressed teaching in Swahili for the sons of coast chiefs, through whom they exercized direct rule. It should also be noted that, in contrast to the missionaries' initial (if later-abandoned) practice of co-education, the government only schooled boys. The government also differed from the missionaries in its inability (or unwillingness) to achieve the latter's rate of quantitative educational expansion, mentioned above. On the eve of World War I there were, according to Cameron and Dodd (1970, p. 56) only 60 governmental village primary schools, 9 government central schools (upper-primary) and one government highschool (with a peak enrolment of 500 pupils).

Other important divergences of policy focused on the content and function of education. The missionaries gave priority to religious education and education for evangelization. The government, on the other hand, was concerned with vocational, civic and general education. The major vocational objective, put bluntly in a 1903 official circular quoted by Cameron and Dodd (1970, p. 56), was "to enable the native to be used in government administration." They also explain (1970, p. 55) how the Germans "singlemindedly set about training the clerks, tax-collectors, interpreters, accountants and artisans needed for government service" at the above-mentioned central schools, which offered a two-year course with a vocational bias, and at the highschool, which offered clerical, industrial and teacher training. Regarding general and civic instruction, the aim set forth in the 1903 circular was no less than "to inculcate a liking for order, cleanliness, diligence and dutifulness and a sound knowledge of German customs and patriotism" (Cameron and Dodd, 1970, p. 56).

---

[5] From the German Schule.

On the whole, while the missionaries busied themselves with colonizing the African's soul, the German government concerned itself with his mind (hoping to breed a race who, although unfortunately black, would nonetheless be orderly, clean, diligent, dutiful and patriotic lovers of German customs) and with his body (to put him to work as a clerk or artisan maintaining the system that was colonizing his mind, or as a teacher colonizing other Africans' minds and bodies).

The literature's preoccupation with the differences between missionary and government educational policies and practices during the German period should not be allowed to veil the fact that these were differences of degree, not of kind. Administrators, pastors and priests disagreed about the tactics of how best to wield education as an arm of domination, but were in complete accord on the strategic aim of domination. Cameron and Dodd affirm (1970, p. 56) that government policy "reflected as much as did the missions' the prevailing [European] attitude that the

African's salvation lay in complete change," i.e., de-Africanization.

The British Period

It is a wry tribute to the power of imperialism (or perhaps merely an example of the lag between the occurrence of a fact and the realization of its meaning) that while the imperial nations battled each other in most uncivilized manner, their African subjects began to become convinced of the superior nature of their masters' civilization. Less than a generation after resistance to physical domination was crushed, cultural penetration had proceeded far enough for the Africans to take it upon themselves to ensure the survival of the school at a time when Europeans were attending to more urgent problems. For Cameron and Dodd (1970, p. 59) this "demonstrated that, however new and alien Western education had been originally [in the Africans' view], they were now beginning to take to it themselves. . . ." In other words, brainwashing of Africans into acceptance of their "need" to become de-Africanized was apparently beginning to succeed. This seems to have been part of the broader phenomenon described by Mende (1972, p. 203) as follows. "Somewhere during [the Third World's] encounter with industrial civilization, as happened in certain battles against colonial armies that were smaller but better armed, there came about a tragic collapse of self-confidence."

This was but one of a number of contradictions that characterized the history of education during British domination, 1919 to 1961. Other major contradictions clustered around the following issues: who was to receive how much education; what education was to be dispensed; and who was to make educational policy?

Who was to receive how much education? This question may be divided into a number of sub-problems, the first concerning the race and sex of school attenders. The stated reason for the racial segregation that prevailed in Tanganyikan schools until Independence was along the lines of the American "separate but equal" doctrine. According to the British Administration's first (1920) report, the purpose of education would be "to develop the people . . . on their own lines and in accordance with their own values and customs . . ." (quoted in Cameron and Dodd, 1970, pp. 59-60). Since there turned out to be three "peoples"--the African, Asian and European--the same authors point out that by 1946 "three racial systems of education, each independent of the other, were built up" (1970, p. 75).

If decidedly separate, however, the systems were far from equal. If only in terms of per-pupil expenditure, European children were most favored, Asians rather less so, and Africans consigned to the poorest schools and taught by the worst paid teachers. Hardly by chance, this order reflected the rank in Tanzanian society for which each system prepared its pupils. Thus a rhetoric of culturally adapted egalitarianism hid the harsher reality of an education designed to teach some to dominate, and others to be dominated. It took 40 years for Britain to become embarrassed by this flagrant contradiction; a commission to study the abolition of segregation was only set up in 1959, its life cut short by the advent of Independence.

Segregation and discrimination by sex were subtler, but no less prevalent. By 1947, not a single female had gone beyond primary school (Cameron and Dodd, 1970, p. 104) and in 1956 the girl:boy ratio in primary schools was still about 1:3 (Dubbledam, 1970, p. 23). Even on the eve of Independence there were few co-educational schools and the British Administration's Annual Report on African Education for 1957 (quoted by Dubbledam, 1970, p. 23) explained that "all mission educationists and many African parents and teachers look with horror on co-education."

What may be said about the social demand for mass education and the imperial power structure's responses to that demand? Once convinced of the value of schooling, the Africans consistently demanded more than the Administration or missions were willing to provide. The missionaries, while favoring virtually limitless expansion of rudimentary education (to produce Christians, "the more of whom the merrier"--Cameron and Dodd, 1970, p. 63), frowned on extension of instruction beyond the literacy level, i.e., enough to understand the Bible but not so much as to result in pupils "turning away from the Church" (Dubbledam, 1970, p. 21). In a different manner, the government also followed a restrictive policy, designed to link (limit) education at all levels to foreseeable employment prospects for school leavers, doubtless on the theory that an oversupply of educated but unemployed Africans would lead to unrest.

The result of these policies was that in 1947, after nearly 30 years of British rule, less than ten per cent of school-age children were actually in school (Cameron and Dodd, 1970, p. 104). That year, the Labour Party launched a ten-year plan aimed at achieving mass attendance. At its end, the schooling rate had risen to nearly 40%. But even this effort was outstripped by the Africans' demand for schooling. This demand found partial satisfaction in bush schools, unregulated classes financed at first by missions and congregations in what Cameron and Dodd (1970,

p. 107) term a "Holy War" with other denominations and later used by TANU[6] as means for questioning--and ultimately ending--colonial rule.

The major contradictions of the British period regarding who was to receive how much education may be summarized as follows: (a) despite its culturally adapted and egalitarian educational rhetoric, the imperial power structure's education discriminated against Africans, and particularly African girls, and thus reflected the inferior role to which the African was relegated in colonial society; (b) although Africans had internalized the colonizer's alien attitudes regarding alien education, they were consistently refused access to such education on a massive scale for fear that too much education for too many would (i) turn them away from the chief institution of spiritual domination (the church), or (ii) create socio-economic expectations (e.g., paid employment) that the empire could not satisfy without severe dislocation (e.g., loss of an abundant supply of cheap manual labor).

What education was to be dispensed? The major issue regarding content of education concerns the conflict between academic and vocational training. In defense of British efforts, Cameron and Dodd point out (1970, pp. 108-109) that

> Subsequent and repeated criticism holds that [curricula] were 'bookish' and grossly unrelated to the real needs of the pupils from a rural society based on traditional subsistence farming methods [but] very serious and earnest attempts were made to relate education to the local environment. . . .

These authors are justified, historically, in saying that localization of curriculum was an early and continuing concern. As they point out (1970, p. 69), the Administration urged (with missionary approval) the adoption of an agriculture-oriented curriculum as long ago as 1928. Dubbledam (1970, pp. 14-15) reports that the Mwanza Central School had, in 1931-1932, a 35 acre farm on which students were meant to work and learn, and that "available information gives the impression that a serious effort was made to prepare the pupils for what was expected to be their life after leaving school." In fact, the model propounded well into the 1950s (when it was finally dropped in the face of African opposition) bears some resemblance to the basic institution proposed in the revolutionary policy of education for self-reliance: a terminal primary education strongly biased toward village-level agriculture and crafts and offering, through fields and workshops, practical learning.

---

[6] Tanganyika African Nationalist Union.

Why, then, did Africans reject this ideally suited education? Zanolli feels that the broader socio-economic context held part of the answer. She says (1971, p. 42):

> . . . curriculum development alone will not solve the problem [of Africanization of education]. The fact is that school leavers' views of their vocation in life are determined largely by what happens outside the school, in the society and the economy.

When they looked beyond the school, what Africans saw (in the way the Europeans themselves had taught them to see it) was a dual society. On one hand was the village: poor, "backward," "uncivilized." On the other was the city: affluent, "modern," "civilized." From the first to the second led but one bridge: academic education. Having firmly implanted this value-laden geography in the minds of those he exploits, and keeping it in the forefront of their minds by the example he himself sets, the exploiter can only be thought to be shortsighted (or hypocritical) when he criticizes the exploited for wanting to cross the bridge.

Thus the Africans found themselves in double jeopardy. When they resisted the imposition of the colonial ideology and model of society (including the school), they were castigated as pagan savages. Then, when they embraced the ideology and attempted to succeed within the society (through the school), their expectations were judged to be unrealistic. This was a main contradiction of education in the British period: it implicitly offered Africans a route to the "success" it was itself helping to define, while simultaneously and explicitly attempting (through "Africanization") to reject them into "failure."

In much of the foregoing, the African may appear to have played a passive role: he was militarily crushed and culturally penetrated, he became convinced of the value of European schooling and he acceded to the negative and positive valuations, respectively, of his village from which he hopes school will transport him to the European's city. He seems to have accepted: accepted imperialism, accepted imperialism's judgments of and prescriptions for himself, and accepted imperialism's means of ensuring his acceptance--the school.

On the surface, a theory of acceptance, i.e., the full internalization of alien values and behaviors, might seem able to explain away the contradictions of education during the British period just outlined--and perhaps even the contradictions among the contradictions. I have suggested, for instance, that the educational discrimination against Africans reflected their inferior status in colonial society. Yet I have also described Africans as viewing schooling as a means of climbing out of inferior status. A sufficiently uncritical acceptance *in toto* of the (admittedly incomprehensible) imperial socio-economic model might indeed explain how Africans could consider the school, which they knew condemned them to inferiority, as a route to success.

The acceptance theory, however, fails the acid test of power: who was to make educational policy? Full acceptance by the Africans of the imperial model of society (and school) should, by all rights, have enabled the British Administration to relinquish educational policy-making to them. Did this in fact occur?

In response to rising African pressure for more education, which was becoming acute already in the late 1920s, the Government encouraged (and assisted) Native Authorities to found and administer their own schools, which came to form the third major kind of education for Africans alongside mission and government institutions. But although the Native Authority schools enjoyed some margin of maneuver, they were subject to Government-established curricula and control. They were an expression of indirect rule--rule *par personne interposée*, but rule all the same.

At best, British rule over Tanganyika and education there had a distinctly paternalistic overtone. Restoration of passages deleted from the above quotation of the Administration's 1920 report (quoted by Cameron and Dodd, 1970, pp. 59-60) is revealing. According to it, the purpose of education was "to develop the people, *as far as possible*, on their own lines and in accordance with their own values and customs, *purified where necessary*" (emphasis added). Who determined how "far" was "possible," what the people's "own lines . . . values and customs" were, how they would be "purified," and "where" such purification would be "necessary?" Decisions as central as these were too important to be handled by even indirect rule and were kept firmly in the hands of the Administration.

Cameron and Dodd take great pains to defend Britain's attempts to

"Africanize" curriculum, and lay a good part of the blame for their failure (1970, p. 231) on the "considerable ambivalence in the attitudes of the Africans themselves towards attempts to attune Western influences to local needs and to regenerate African society from within." The operative words are glaringly absent--attempts by whom to attune Western influences?--and this omission epitomizes the chief contradiction of education during the British period, the contradiction that underlies the others, the contradiction of power. How, indeed, could education help "regenerate African society from within" from without? Cameron and Dodd themselves demonstrate their awareness of the supreme contradiction. In an unintentional *non sequitur* they claim (1970, p. 231) that pre-Independence curricula were "locally devised or adapted . . . in response to local needs, although admittedly these needs had been interpreted by the administering power and not by the people themselves."

Tanzanian Education: The Western Period

The contradiction of power was resolved, in formal terms, by the assumption of Independence by Tanzania in 1961. In practice, however, a century of political domination, economic exploitation and corresponding cultural (including educational) aggression could not be signed away at a single stroke of the pen. Like the image that dances on one's retina when one closes one's eyes after looking at a strong light, colonial education remained, for a time, the model of reference, or at least the given raw material, with which Tanzanian politicians, educators, parents and pupils contented themselves.

Cameron and Dodd (1970, p. 170) refer to the years 1961-1967 as the "incubation period" for what was to become an authentically Tanzanian alternative to the colonial model. But in retrospect this metaphor appears to be misleading for it implies that the Tanzanian model-to-come already existed, albeit in embryonic form, in the minds of at least some Tanzanians. Examination of certain highlights of this--the Western--period of independent educational development reveals that while certain ameliorative steps were taken, these were not the expression of a coherent strategy for resolving the contradictions inherited from the colonial period. Highlights reviewed here include: the 1961 Educational Ordinance; modifications concerning the quantity of primary and secondary education; Africanization of the curriculum; and the language issue.

In appearance, the Educational Ordinance of 1961 was a progressive measure of unprecedented import in Tanzanian educational history. It provided for nothing less than the abolition of three school systems segregated by race and the introduction of a single system, open (in theory) to all. Cameron and Dodd (1970, p. 177) salute this measure as being "evolved through moderation rather than through fierce imposition from above." In this case, however, the authorities' moderation seems to have meant that integration was achieved mainly by the opening of higher-standard non-African schools to Africans . . . who could pay the fees.

Ambiguity between rhetoric and reality also characterized the Government's efforts with regard to the quantity of primary and secondary education made available. At the former level, a start was made on eliminating the difference between rural education (most country schools provided the first four years of education) and urban education (which generally offered complete primary schooling, i.e., through Standard VIII). This was done, however, by vertical readjustment and consolidation--reducing the total length of primary education to seven years, adding three Standards to four-year rural schools, and taking steps toward the abolition of the discriminatory Standard IV leaving exam--rather than by horizontal expansion of primary schooling to the overwhelming majority of rural young people who went without. Expansion was reserved for the secondary level, in continuation of the policy (which prevailed immediately prior to Independence) of absorbing ever-greater numbers of the "bulge" of primary school leavers created by the Labour Party's 1947-1956 mass education program. In effect, then, the Government's quantitative efforts served chiefly to broaden slightly the tiny educated elite.

Regarding Africanization of the curriculum, Cameron and Dodd maintain (1970, p. 190) that "the content of the history, geography and citizenship [courses] was . . . localized . . ." while Vacchi (1973, p. 97) reports that Africanization "was limited . . . to an increased interest in crafts and in local music," and Zanolli (1971, p. 40) deems that the "new" 1963 syllabus was "molded after the syllabus which had been in use under the colonial government. . . ." Whatever the actual extent of change, it cannot be claimed that full Africanization took place since primary education's internal function was still to prepare for secondary education which, in turn, still prepared for British-oriented examinations and matriculation to British-oriented universities (particularly the tri-territory University of East Africa) or, more simply, to British universities.

With regard to language, the tendency also seems to have been to "walk on two legs" which were following divergent paths. In the name of Africanization, Swahili was made the medium of instruction in all but a few primary schools (those attended by expatriate children) and also became a compulsory subject in secondary schools. Similarly, from 1965 all teachers were required to pass a written Swahili exam. On the other hand, since expatriate staff were in a majority at the secondary level (and since secondary school mainly prepared for English-speaking university), expediency required the maintenance of English as the medium. More, teaching of English began in the first year of primary education (rather than the third, as in the colonial period) "so that the transition from the medium of Swahili to the medium of English in post-primary education [could] be more smoothly effected" (Cameron and Dodd, 1970, p. 192). Thus, while efforts of more than token value were made to provide education in the national language, primary pupils simultaneously began to learn earlier than under the British a tongue that only a very few of them would ever use as a medium of instruction in secondary school.

On the whole, Tanzanian education during its Western period (1961-1966) was rent by ambiguities. The integrated single system affected only a privileged few; quantitative readjustments did offer the prospect of more education to those rural children already in school, and to a slightly expanded minority elite of primary school leavers, but provided no education for the unschooled majority of rural youngsters; limited Africanization of the curriculum did little, if anything, to deflect schooling from its chief function: preparation fo alien further education; and although Swahili became the medium of primary instruction, it did not dethrone English as the educated man's language.

To some extent, these ambiguities were dictated by such objective conditions as the lack of Swahili-speaking secondary school teachers. But in a more important sense, the Western period's "moderation" hailed by Cameron and Dodd was often synonymous with indecision, a lack not so much of the means as of the will to come to grips with the contradictions inherited from the British in education as in other spheres.

As suggested above, education cannot be studied in isolation from the ambient society and world. Speaking of the curriculum--but the reference is valid for the entire search for an authentic Tanzanian alternative to colonial education--Vacchi affirms (1973, p. 96) that Africanization is a "mystification . . . if it is not accompanied by a progressive political vision that really tends to transform the country politically, economically and culturally."

For reasons this is not the place to explore, just such a vision coalesced in the minds of Tanzania's leaders--and particularly President Nyerere--in early 1967. For Vacchi (1973, p. 106), Nyerere "assumed the thankless task of promoting, practically out of thin air, a 'cultural revolution,' and of mobilizing the masses around relevant objectives. . . ." This "cultural revolution" of intent--combining a vision and mass mobilization--was expressed in the Arusha Declaration (TANU, 1967) and the proclamation on Education for Self-Reliance (Nyerere, 1967). These documents struck into the held-over socio-economic system and its educational vehicle for self-reproduction like two axe blows to the heart of the imperial model.

Applied to social change in the Third World, the dialectic of Newton's third law suggests that the stronger the hold of imperialism on a people's mind the stronger will be their reaction once a certain threshold of consciousness of their domination is reached. The 1967 declarations served public notice that just such a threshold had been reached: they announced nothing less than a revolution--including of necessity an educational revolution.

Conclusions

To conclude this review of the pre-revolutionary history of Tanzanian education, and to set the stage for the following sections' discussion of revolutionary educational policies and practices, it may be useful to compare the salient features of traditional African education with the educational situation on the eve of education for self-reliance. For the sake of clarity, this comparison is drawn in sharp--and probably oversimplified--lines.

I suggested above that traditional education was generally undifferentiated. Education in the mid-1960s was the opposite. It was strictly limited to a prescribed place: the school, and to a special time of the learner's day: school hours, and of his or her life: youth. It was imparted exclusively by specially trained and diplomaed staff, classified according to a rigid hierarchy. There was total segregation between the educated and the educator.

In my view, traditional education was, on the whole, relevant. Pre-self-reliance education was, with few exceptions, irrelevant. The skills, behavior and attitudes it taught were inconsistent with most of the objective personal, social and civic needs of Tanzanians.

Thirdly, traditional education seems to have been functional. The curriculum and pedagogy of education in the mid-1960s were such that what was taught and the way it was taught could generally not be immediately and usefully applied.

Finally, in terms of audience, traditional education was apparently more community-oriented than focused on an elite. Before the self-reliance policy, education was sharply discriminatory. At the outset, it excluded over half the population from school, and of those beginning primary education (which was designed to prepare for secondary school) only a tiny minority moved to post-primary instruction, with a still smaller elite reaching university, the pinnacle toward whose ultimate ascension lower levels of education were geared.

Differentiated, irrelevant, dysfunctional and discriminatory--schooling in Tanzania's Western period was the antithesis of traditional education. It was an alien graft which, although it appeared to have gained acceptance by the Tanzanian body politic, had in fact introduced and spread debilitating psychological disease. If not ultimately rejected, the graft might prove fatal. Its rejection--and the cure of Tanzania's body politic with home-brewed organic medicine--was the challenge faced by the policy of education for self-reliance.

CHAPTER II

THE GOALS OF EDUCATION

To what extent do stated goals for education exist? What are the sources for these goals? Do the goals have a collective or individualistic orientation? What is their meaning with regard to knowledge? These issues are considered to be particularly revealing of a country's vision of and approach to education, and of the relationship--within that vision and approach--between formal and non-formal education.

To What Extent Do Stated Goals Exist?

There is agreement among students of Tanzanian development, and educational development, that one of the particularities of the country's model is the existence of clearly stated goals. Lewis (ed.) et al. (1971, p. 1.1) state that "in contrast with many developing countries, Tanzania has a clearly formulated set of national goals which provide the guidelines for national development." In Hatch's view (1973, p. 9) "an explicit and articulate educational philosophy and design like that set forth in Education for Self-Reliance is an unusual occurrence."

With respect to formal education, these affirmations are undeniably borne out with regard to medium- and long-term goals in, respectively, the Second Five-Year Plan (1969-1974) and Nyerere's Education for Self-Reliance. Different aspects of the Government's goals concerning the roles schooling is intended to play in achieving the overall medium-term development targets are set forth and explained in the Plan. In a longer-term perspective, Education for Self-Reliance is concerned exclusively with criticizing school and university education of the early 1960s and with proposing main lines of alternative development for different levels of formal education, particularly the primary school.

A further important characteristic of the Tanzanian situation is that the stated goals for formal education have not remained platonic declarations of intent with little impact beyond the higher echelons of central government. Rather, they have been the subject of intensive and extensive explanation campaigns reaching down to the village level. After a visit to the countryside, Sochor (1970, p. 11) found that the concept of self-reliance, "applied to the current educational reform here, covers a coherent re-examination of the school system, its syllabus, examinations and above all its goals."

On first examination, the situation with regard to non-formal education seems much less clear. A Unesco situation paper (Tanzania, 1973, p. 2) affirms that "Tanzania has a broad educational strategy, which aims to provide some sort of learning for all citizens, particularly adult peasants and craftsmen in rural areas." The adults referred to are to be reached by non-formal programs, which, one infers, enjoy special favor in the broad strategy. Curiously, however, non-formal education is not specifically mentioned in Education for Self-Reliance and the Plan makes only rather limited references to non-formal activity, as compared with its extensive treatment of formal education.

Goals for non-formal education are stated at conceptual as well as operational levels (cf. Hall and Mhaiki, 1972, pp. 1-7), but for sectoral programs, both medium-term (such as the literacy program: Pilot Project of Functional Literacy, 1967, p. 3) and short-term (such as the 1971 Time of Rejoicing (Wakati wa Furaha) radio education campaign: Hall and Mhaiki, 1972, p. 38; and the 1973 health education campaign: "Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 1). Although, as we shall see in later chapters, these and other non-formal programs have played a large and growing part in overall educational effort (and expenditure), their stated goals have received little attention in such intersectoral documents as the Plan and none at all in the major declaration of long-term intentions.

A re-reading of Education for Self-Reliance suggests, however, that if a coherent presentation of the goals of non-formal programs (and of their relation to overall educational goals) is absent, non-formal concepts have strongly influenced the re-orientation of goals for formal education.

Among Nyerere's proposals are: the down-grading of academic examinations since they "do not assess character or willingness to serve" (Nyerere, 1967, p. 17); the transformation of schools into communities in which teachers, workers and pupils would be members of a social unit; the introduction of productive work into the curriculum; and the participation of pupils in decision-making as a learning process. These and similar proposals which have immediate implications for schooling's external goals and some of which have been included in the Plan, have an unmistakably non-formal ring.

To summarize, it seems that clearly stated goals for formal education exist, both at the conceptual and operational levels, and as regards global long-term and medium-term planning. On the other hand, goals for non-formal education, while existing at both conceptual and operational stages, tend to be stated sectorally, for medium- and short-term programs, while being noticeably absent or de-emphasized in global long- and medium-term goal statements. Non-formal thinking has, however, clearly influenced long- and medium-term reformulation of goal setting for formal education.

The Sources of Goals

As in any country, Tanzania's educational goals stem from a variety of sources: philosophical and ideological; political interest and pressure groups; and diverse interpretations of past and present realities. But Tanzania is special, if not unique, in that a single man, President Nyerere, has served both as interpreter of and arbiter among ideas coming from other sources of goals and as an original and creative educational thinker--a direct and indirect source of formal and non-formal goals himself. Indeed, part of Nyerere's charisma lies in the fact that, before launching his political career with the founding of TANU in 1954, he was a teacher and that his concept of his role as national leader includes constant reassessment, learning and explanation, i.e., education in the broadest sense. Since Independence, and particularly since the threshold year of 1967, Tanzania has been something of a giant in-service seminar, with Nyerere in the professor's chair. For contemporary as well as historical reasons, then, there is fact rather than demagogy in his respectful nickname: Mwalimu (teacher).

A second source of goals on which both formal and non-formal education has drawn is the Tanzanian ideology. Lewis (ed.) et al. point out (1971, p. 1.1) that the guidelines for educational development "stem from an indigenous socialist philosophy and a commitment to self-reliance in building a cooperative society." As propounded by Nyerere in various writings (1968) and summarized in TANU's Arusha Declaration, the Tanzanian ideology has a number of special features of particular importance for the shaping of educational goals.

Although it proposes certain universal principles, such as human equality and dignity, the ideology is known by the Swahili name ujamaa (roughly: familyhood) which precisely because it cannot be fully translated into European languages, symbolizes the peculiarly African nature of the ideology itself. Nyerere

> . . . grew up as a goatherd . . . a member of a tribe and village in which everyone worked and everyone shared the results of work, in which there were no landowners, no employers and no class divisions. These are the roots of Nyerere's socialism ("Nyerere," 1970, p. 2).

Furthermore, the originality of ujamaa socialism lies not only in its

Africanness, but also in its rejection of a mechanistic or quantitative approach to development. For Nyerere (quoted in "Nyerere," October, 1970, p. 5) "Socialism is an attitude of mind which is achieved by education and not legislation." With regard to the goals of both formal and non-formal education, the African and qualitative orientations of the Tanzanian ideology have made possible the search for an alternative to the European-based and technocratic educational model outlined in the first part of this study.

A third major source of educational goals has been the constant reassessment of reality in light of the ideology. Here, distinctions appear between formal and non-formal goal setting. On the whole, the revision of school education in light of the ideology may be said to have taken place directly and globally at the national level. The provisions for development of formal education in the First Five-Year Plan were drawn up in 1964, a time when, Nyerere told a 1969 TANU Conference (quoted in the Second Five-Year Plan, 1969, Vol. II, p. ix) "we had not worked out at all clearly the implication of our socialist belief." Following the Arusha Declaration and its interpretation regarding education in Education for Self-Reliance, however, the first Plan's orientations were found (Second Five-Year Plan, 1969, Vol. I, p. 7) "incompatible with . . . socialist ideals . . ." and the second Plan offered a different strategy. To the extent that the new strategy provided for the introduction of certain non-formal elements into goals for the formal system of education (see previous section), the direct and global application of ideology to reality at the national level referred to non-formal as well as formal education.

The same does not appear entirely to hold true for non-formal programs. With regard to these programs the application of ideology to reality seems to take place in three ways differing more or less from the sequence just described for formal education. First is the sectoral approach, according to which the training needs at different levels of a given type of institution are catered for. This occurs, for instance, in the cooperative education program.

The rapid post-Independence expansion of cooperative societies, which more than doubled in number between 1961 and 1969, meant that the duties of people with various degrees of responsibility (staff, committee chairmen, members) "had been profoundly changed and substantially broadened almost overnight" (Grabe, 1972, pp. 7-8) with a resultant need for training. In recognition of this need, but also taking into account the important new role accorded cooperativism by the Arusha Declaration in implementing self-reliance, the small cooperative education program set up in 1964 was overhauled and expanded to strengthen and reorient the movement through various kinds of in-service training. As Grabe indicates (1972, p. 10), "The objectives and policies for cooperative education have thus been determined in the light of the specific Tanzanian situation and the long-term policies of transforming the society on the basis of socialist self-reliance." As in the case of formal education, the goals of this first kind of non-formal program emerged from the direct application of ideology to reality at the national level, but--and herein lies the particularity--in a sectoral rather than global setting.

The second non-formal variant concerns highly localized programs, such as those of adult education and the courses at Rural Training Centers. The Lewis team (1971, p. 5.9) say that "Decisions on what type of courses should be offered are supposed to be made at the village level by the adult learners. . . ." Similarly (1971, p. 5.13), Rural Training Centers "are supposed to respond to local priorities and initiatives. . . ." Here, ideology is less directly present--such programs reflect the rural focus of _ujamaa_ socialism in a rather general way--and the approach tends to be sectoral--insofar as _ujamaa_ villages may be considered institutions and since these programs are generally meant to give priority service to _ujamaa_ villages. The defining characteristic is, however, the very local nature of the contact with reality which, it may be surmised, probably overshadows ideology in the shaping of at least some program goals.

The final case, which is also relevant for certain formal institutions, is that of non-formal technical education and training. Lewis (ed.) et al. (1971, p. 6.1) state that

> . . . the programs of technical education and training are the outgrowth of . . . aid from many diverse sources. The result is a collection of projects rather than a coherent system of learning, due in some cases to the approaches of different donor agencies that have not been compatible.

In consequence (1971, p. 6.16)

> Technical education and training is obviously of central importance in Tanzania's learning system, but its major orientation is toward the needs of the modern sector and urban development . . .

i.e., towards precisely the kind of development that _ujamaa_ socialism rejects. Ideology does not appear to have been applied to reality in setting goals for this sort of program.

A final source of educational goals is institutional. In addition to the Government's obvious part, major national interest and political organizations have played a fundamental role in defining the purposes of both formal and non-formal education. According to Dubbledam (1970, p. 28), Education for Self-Reliance "met at least some" of a long list of far-reaching demands made by the Tanganyika African Parents Association's 1966 Annual Conference. TANU formulated the Arusha Declaration, and helped shape its translation into educational (and other) goals at a 1969 Party Conference that deliberated on the Second Five-Year Plan. It was also at a TANU meeting, in 1971, that it was decided to transform the Experimental Literacy Project into a National Campaign designed to eliminate illiteracy.

In addition to the role of government and national interest and political organizations, and unlike formal education, non-formal programs have been considerably influenced by at least one specialized agency, the Institute of Adult Education at the University of Dar es Salaam, which aside from organizing courses ensures what Mhaiki and Hall (1972, p. 26) call "intellectual coordination" of adult education programs.

In summary, the goals of both formal and non-formal education stem equally from the charismatic leadership of Nyerere and the original ideology of ujamaa socialism. With regard to the interpretation of reality in the light of the ideology, however, certain differences appear. The goals of formal education (with the exception of certain kinds of technical training) seem to have been reshaped thanks to the direct and global application of ideology to reality, which has resulted in the introduction of certain non-formal concepts. In contrast, goals of non-formal programs have tended to evolve through a less direct and/or sectoral and/or highly localized application of ideology to reality, or (in the case of at least some technical programs) no application at all. Government and national interest and political organizations have contributed to goal setting for both formal and non-formal education, but the latter has been particularly influenced by a single specialized agency, the Institute of Adult Education.

Collective or Individual Orientation of Goal Content

To some degree, a distinction between collectively oriented and individually oriented goals is artificial. It is hard to say, for example, whether adequate civic training is of greater value to the man or woman who has received it or to the society of which he or she is a citizen. Nevertheless, the individual or collective orientation of stated educational goals, and the spheres of learning in which this orientation expresses itself, are highly indicative of the nature and direction of the education under examination here, and especially of the relation between formal and non-formal education.

The *Second Five-Year Plan* lays down three priorities regarding formal education and training (1969, Vol. I, p. 148):

> It is the policy of the Government . . . (i) to achieve essentially full self-sufficiency at all skill levels in the economy by 1980; (ii) to give every Tanzanian child a basic education (Primary) . . . by 1989, (iii) to provide additional or further education (secondary, technical and university) only to the extent justified by the Manpower requirements of the economy for development. . . .

These priorities appear to reflect two preoccupations, one (point (ii): universal access to primary school) an individual right and the other (points (i) and (iii): strict linkage to manpower needs) a collective necessity.

The first preoccupation, expressed here in the form of an aim or objective (as defined at the beginning of this chapter) rather than a goal, is spelled out in goal terms elsewhere in the *Plan*. The Government is said (1969, Vol. I, p. 8) to be "committed to a transformation in the content of primary education towards an emphasis on the needs of the school leaver who must make his life in rural society." The clearly individual frame of reference of this goal does not, however, sacrifice the general to the particular. In a country 95% of whose population is rural, the replacement of urban-oriented primary education, whose main function was to prepare for the secondary schooling most pupils would not receive, with village-based terminal education, is tantamount to offering what the Plan (1969, Vol. I, p. 5) terms education "geared to the needs of the majority in a developing rural economy. . . ."

Within this overall orientation, where individual and collective interests mesh, the main focus of stated goals is vocational/economic. According to the Plan (1969, Vol. I, p. 5), primary education "will increasingly concentrate on the preparation of youngsters to play a productive role in the countryside."

When addressing the overall change desired for primary education, Nyerere (1967, p. 15) admittedly speaks in generalities:

> We should determine the type of things taught in the primary schools by the things which the boy or girl ought to know--that is, the skills he ought to acquire and the values he ought to cherish if he, or she, is to live happily and well in a socialist and predominantly rural society, and contribute to the improvement of life there.

When he comes to specifics, however, his concern--as later reflected in the above-quoted Plan provisions--is vocational and economic. This is pervasively translated in his suggested curriculum (subjects must enable the pupil to learn to work), methods (learning to work by working), and organization (the school becomes an economic community).

Civic education, in the form of self-reliance, is also of overriding importance among Nyerere's general goals for primary education. If, however, it is not subordinate to vocational preparation in theoretical terms, it does at least find its clearest practical expression in the proposals for the pupil's and school's economic activity. Thus (Nyerere, 1967, p. 21) "school farms must be created by the school community clearing their own bush, and so on--but doing it together. . . . By such means, the students can learn the advantages of cooperative endeavor. . . ."

At the primary level, then, stated goals may be said to provide for roughly equal stress on individual and collective concerns, the former being considered largely synonymous with the latter, and to express these concerns chiefly in terms of vocational/economic education, which is to be organized as a means for learning and practicing the self-reliant tenets of ujamaa socialism.

At the post-primary level, on the other hand, the balance tips clearly in favor of the collective. This occurs for two reasons. First, as indicated by the Plan goals (i) and (iii) quoted at the beginning of this section, is what is deemed an imperative need to link the kinds and amounts of post-primary education directly to higher-level manpower requirements. According to Sochor (1970, p. 12), secondary and university education are "closely controlled to suit manpower estimates of the Ministry of Economic Affairs and Development Planning." The individual right to education ends, therefore, with primary schooling and is replaced, at the post-primary level, by collective necessity since post-primary leavers (Sochor, 1970, p. 12) "are channeled [by inter-ministerial committees] toward productive and essential work."

The second reason for the predominance of collective over individual concerns in stated goals for the post-primary level lies in the particular status of secondary and university students. The kinds and amounts of education they receive are determined by national economic need, their education becoming therefore something of a duty. But the very fact that they are receiving further education, i.e., preparation for leadership, also makes them a privileged minority. In Nyerere's view, such privilege would be incompatible with the socialist orientation of the society if it were not accompanied by special sacrifices on the part of the students. He is quoted by Sochor (1970, p. 11) as saying

> Those who receive this privilege [of post-primary education] have a duty to repay the sacrifice which others have made. They are like a man who has been given all the food available in a starving village in order that he might have the strength to bring back supplies from a distant place.

Taken together, non-formal programs display the following pattern: stated goals give, on the whole, predominant emphasis to vocational/economic and civic/political education, and within each of these subject areas there appears to be a balance between individual and collective orientations. A collective/civic concern predominated, for example, in the aims of the 1971 Time for Rejoicing radio education campaign (Hall and Mhaiki, 1972, p. 38): "Above all, awaken a national feeling: make the citizens understand that whoever they are, wherever they live and whatever they do, they are all Tanzanians," while London (1973, p. 463) reports an important aim of political education among adults to be "to increase the unity of all tribal groups and all sectors of the population. . . ." A similar collectivist tone appears in the *Plan*'s reference to adult education (1969, Vol. I, p. 8), which declares the goal of enabling learners "to acquire a clear understanding of the obligations of a self-reliant society and the possibilities for contributing to the Nation's development. . . ."

The goals of non-formal civic/political education are not, however, limited to transmission and inculcation of ideology from the summit to the base. The intent to encourage a reciprocal movement of ideas also exists. Paraphrasing TANU's 1971 Party Guidelines, Hall and Mhaiki (1972, p. 6) point out that adult education must facilitate grass-roots participation in decision-making since "if development is to benefit all the people, the people must participate in the design, study and implementation of their development projects."

A similar balance characterizes non-formal programs of vocational/economic education. A collective orientation appears in the Government's stated determination (reported in Viscusi, 1972, p. 11) "to invest in expensive literacy programmes only if the result will further social and economic development," thanks to the adoption of Unesco's work-oriented literacy approach. The experimental project referred to, and the national campaign into which it has grown, do not, however, subordinate the immediate wishes of individual learners to long-range collective economic requirements. Viscusi continues: "At the same time, the Government realises that illiterates themselves . . . will not become permanently literate unless they, too, can see a use for literacy, unless in some way it changes their lives." This functional criterion pervades many non-formal programs and was, indeed, a central theme of Nyerere's 1970 New Year speech, with which he launched Adult Education Year. An important goal of adult education, he said (paraphrased in Hall and Mhaiki, 1972, p. 4), was "to give the people the necessary knowledge for them to effect changes in their own setting."

The goal of educating to elicit change from the ground up also exists in non-formal programs outside the priority spheres of vocational/economic and civic/political activity. Thus the 1973 radio health education campaign ("Large-Scale Multi-Media Health Education Campaign in Tanzania," October-November 1973, p. 1) strove "to increase participants' awareness and encourage group actions regarding measures which they can take to improve their own health."

The situation with regard to collective or individual orientation of stated educational goals may be summarized as follows. At the primary level the individual and collective concerns expressed seem to be largely synonymous since there is an identical interest of each pupil and of the nation at large in the provision of terminal education that is useful in the countryside. Further, useful education is considered chiefly to be vocational/economic preparation and participation organized according to the ideological principles of self-reliance. An examination of non-formal programs suggests that, taken as a whole (and despite variations of stress from program to program), they seem to be characterized by a similar balance between collective and individual concerns in (and between) the priority areas of vocational/economic and civic/political education. The goals of post-primary formal education, on the other hand, seem to tip the scales in favor of a strongly collective concern and a preoccupation with vocational/economic preparation so overriding that ultimate control of curriculum and enrolment lies not with the Ministry of National Education but with the Ministry of Economic Affairs and Development Planning.

Thus, there appears to be a general resemblance between the goals of regenerated primary education in Tanzania and those of the country's non-formal education. In somewhat different ways, both: balance individual and collective orientations, and economic and ideological concerns; focus on the countryside; and offer terminal learning of practical applicability. Thus, primary schooling, although nominally formal, seems to have goals that, in important respects, resemble those of non-formal education more than those of post-primary formal education.

The Meaning of Educational Goals With Regard to Knowledge

All education is--albeit far from exclusively--concerned with knowledge. Usually, a country's education and educational institutions deal with the generation, storage, dissemination and use of knowledge, generation and storage being functions peculiar to institutions of higher learning, dissemination characterizing all levels of education, and use--particularly short-term use--remaining a generally peripheral function except insofar as it concerns the other three. This section examines the roles of these four knowledge-related functions of education with regard to the goals of formal and non-formal education in Tanzania, respectively.

In *Education for Self-Reliance*, one of Nyerere's strongest criticisms of schooling in what I have called the Western period of Tanzania's education was the divergence between school and society. Developing the argument (1967, p. 11) that "Tanzania's education is such as to divorce [pupils from] the society it is supposed to be preparing them for . . . the school is always separate; it is not part of the society," he attacks the self-appointed elitism of the educated as (1967, p. 13) "the arrogance of the book-learned," a sense of superiority that is unfounded since it is irresponsible in that students (1967, p. 14) "not only . . . fail to contribute to that increase in output which is urgent for our nation; they themselves consume the output of older and often weaker people . . . they do not learn as they work, they simply learn." This is not some mindless assault on any and all aspects of academic education. Rather, the attack pinpoints the sterility and dysfunctionality, in a poor country, of an undifferentiated adulation of learning for learning's sake. It is a moderate attack at that, for Nyerere concludes (1967, p. 13) that "It is as much a mistake to over-value book learning as it is to undervalue it."

As a reaction to the isolation, exaggerated importance and dysfunctionality of Western-period education, post-1967 goals for formal education stress integration, a balance between theory and practice, and functionality. As we have seen, the Plan (1969, Vol. I, p. 5) provides for terminal primary education focused "on the preparation of youngsters to play a productive role in the countryside [and] secondary education . . . geared to the vocational requirements of the society." The integrative and functional orientation of these goals is, moreover, not limited to preparation for a future productive role, a medium-term return in the case of the seven-year primary education and a long-term goal in the case of post-primary education. Nyerere's proposal to transform schools into productive as well as educational units (1967, p. 13, emphasis added) is explicitly "not a suggestion that a school farm or workshop should be attached to every school for training purposes [only]. It is a suggestion that every school should also be a farm [with] people who are both . . . pupils and farmers." Here, the proposal to balance classroom and practical learning is also evident since "pupils working on [the school farm] should be learning the techniques and tasks of farming."

The utilitarian approach is almost as intense at the post-secondary level of formal instruction, traditionally a bastion for the isolated, self-important and dysfunctional notions of education taken to task by Nyerere. Lewis (ed.) et al. list (1971, p. 8.5) the four main purposes of the University of Dar es Salaam as:

1. Preparation of high-level manpower;
2. Promotion of the ideology of Tanzanian socialism;
3. Provision of direct service to the society; and
4. Research.

Depending on how and why it is carried out, research--generation of knowledge--may be considered the least utilitarian goal. Promotion of ideology and preparation of manpower are particularly concerned with dissemination of knowledge, although both (and notably the latter, given the definition of who learns what in light of manpower requirements) are intended to be of use (admittedly long-term since a "complete" requires a total of upwards of 16 years of formal education). Furthermore, direct service to the society is an overwhelmingly utilitarian goal.

To the extent that short-term application of knowledge imparted is explicit in the goals of many non-formal programs in the Third World, while not generally being a feature of formal education there (or in the industrial countries), it would appear that the emphatic presence of this characteristic, especially though not exclusively in goals for the primary school, reflects an incursion of non-formal thinking into the formal domain.

In non-formal education, dissemination of knowledge has been increasingly subordinated to its immediate use. Thus, while the 1971 Time of Rejoicing radio education campaign strove to inculcate a sense of national pride by "tracing the main lines of development of Tanzania from the distant past until today" (Hall and Mhaiki, 1972, p. 38), and although one goal of the 1973 radio health education project was "to provide information about the symptoms and prevention of specific diseases" ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 1), the latter project was also characterized, throughout, by

> . . . an emphasis on action, both by individuals and by groups. Some of the activities undertaken were: filling in breeding grounds for mosquitoes, clearing vegetation away from houses, killing the snails that carry bilharzia, and the construction of latrines (1973, pp. 12-13).

A similar evolution has taken place in literacy work. Originally intended to spread reading and writing, literacy has changed under the Unesco work-oriented approach to the point where, according to Viscusi (1971, p. 11) "making people literate is not a goal in itself," the goal being (1971, p. 5) to provide "education they can use to make tomorrow's farming or fishing more profitable than today's." In the words of London (1973, p. 461), "the target . . . is now the development of literacy skills that can be immediately applied at work, at home and in the community. The stress is on immediate and practical application."

In summary, a salient characteristic of stated goals of both formal and non-formal education is that both strongly accentuate the use of knowledge, to the point of subordinating (in some cases) knowledge's dissemination to its use. There are some secondary differences. Thus, although no mention is made of storage of knowledge, even at the university level, generation of knowledge is a major goal there, while not featuring at all among the declared purposes of non-formal programs. Also, while formal education spans the return-lag in use of knowledge from short- and medium-term (primary school) through short- and, equally, long-term (secondary school) to short- and particularly long-term (university), non-formal programs tend clearly to favor immediate application (radio campaigns, literacy work), although some (e.g., Rural Training Centers and cooperative correspondence courses described below) verge on medium-term return time. But these are differences of degree, rather than kind. On the whole, in their utilitarian approach to knowledge, the goals of formal instruction and non-formal programs are more similar than dissimilar. Indeed its presence in formal education, particularly at the primary level, suggests an incursion of non-formal thinking into the formal domain.

Conclusions

Before concluding, it is well to recall that, at this stage in the case study, post-1967 Tanzanian education has not been examined as it exists but as it is explicitly meant to exist, i.e., in the light of stated goals for the impacts and functions it is intended and expected to have with regard to man and society. Under study here, then, has been the recipe, not the pudding.

A number of conclusions may be drawn from this chapter. First, that, in terms of stated goals, there are clear differences between formal education and non-formal programs in Tanzania. Formal goals: are stated globally for medium- and long-term action; stem from the direct, global and national application of ideology to reality, and--at the post-primary level, at least--stress collective-oriented and vocational/economic education. In contrast, goals of non-formal programs: are stated sectorally for short- and medium-term action; stem from less direct and/or sectoral and/or localized application of ideology to reality; and display an overall balance between collective and individual orientation and vocational/economic and civic/political education.

Just as evidently, however, there are clear similarities between formal education and non-formal programs. Outstanding among these similarities are: the statement of goals at both conceptual and operational levels; the influence of President Nyerere and the ideology of ujamaa socialism on goal formulation; the collective:individual and vocational:ideological balances struck (at the primary level, as regards formal education); and the stress on short- to medium-term applicability of knowledge imparted (particularly at the primary level, as regards formal education).

Thirdly, non-formal thinking, apparently distinct from non-formal programs, seems to have influenced the reshaping of formal education. Evidence to this effect includes the presence of certain non-formal elements in reformulated goals for formal education, possibly introduced as a result of the application of ideology to reality, and the considerable stress on imparting, particularly at the primary level, useful knowledge of short- to medium-term applicability. That this influence appears to have been exercised by general non-formal thinking rather than specific non-formal programs is suggested by the absence of any reference to such programs in *Education for Self-Reliance* and their very limited place, compared with formal education, in the *Second Five-Year Plan*.

On the whole, then, an examination of stated educational goals in Tanzania suggests that, to date, the policy of education for self-reliance has resulted in the emergence of two kinds of education: on one hand, a system of formal education that, in some respects and particularly at the primary level, has evolved in the direction of non-formal education and, on the other hand, a number of non-formal programs. The similarities between formal and non-formal education are apparently less due to any direct causal influence of non-formal programs on formal education (there being no evidence of such influence), than to the objective relevancy of at least certain aspects of the non-formal approach to the needs of Tanzania, as interpreted in the light of *ujamaa* socialism. An assessment of these needs, and their translation into educational goals, appears to have resulted simultaneously in the reshaping of formal education according to non-formal lines and in the expansion of specifically non-formal education.

That the sector of formal education having evolved most markedly in the direction of non-formal responses in the primary school may, speculatively, be explained by the following factors. First, literally as well as figuratively, the primary school target population is closest to the grass roots; and, whatever may be the enhanced multiplier effect of investment in post-primary education, primary pupils constitute the overwhelming majority of candidates for some kind or other of formal education. It would seem logical that the education destined for the vast rural majority, which is most vulnerable to the contradictions of pre-1967 schooling, should receive priority attention for non-formal reshaping in the direction of relevancy. Conversely, it would seem that, although the goal of manpower self-sufficiency corresponds to the self-reliant ideology, manpower requirements may still be defined largely in terms of the Western, urban and "modern" sector of the economy, and that, therefore, education to meet such requirements would prove most resistant to (non-formal) change in the direction of relevancy to the national situation as a whole.

CHAPTER III

THE AMOUNT OF EDUCATION

How many shall be educated? Who shall be educated? For how long shall they be educated? In what sequences? The respective answers to these questions for formal and non-formal education offer insights into Tanzania's response to the global issue of the amount of education it should and will offer.

Education in Space: How Many Shall Be Educated?

What are the target populations of different levels of formal education and different kinds of non-formal programs? Insofar as evidence is available, to what extent are these target populations actually served?

In the broadest long-range sense, the main target group for education is the whole population of Tanzania. According to the Second Five-Year Plan (1969, Vol. I. p. 2), "Basically, if all Tanzanians . . . have access to basic education . . . Tanzania will have achieved more . . . success [in providing goods and services to its citizens] than many supposedly wealthy societies." The operational notions here, in terms of quantitative access to education, are "basic education" and "all Tanzanians." The challenge the Tanzanian revolution has set itself, in line with the egalitarian and humanistic tenets of *ujamaa* socialism, is to flatten the educational pyramid characteristic of many non-industrial countries, where a few tend to receive much education. In Tanzania, the aim is to provide all with at least a little education.

In practical terms, and with regard to the relative importance of primary and secondary schooling, this aim has resulted in a policy that reversed the trend of the Western period. Under the First Five-Year Plan, from 1964 to 1968, the number of entrants to Standard I (the first year of primary school) rose from 160,000 to 318,000 (Who What Where in Tanzania, 1971, (?), p. 27) i.e., almost 100%, while from 1962 to 1968 the total enrolment in all seven primary Standards grew by 49.7% and the number of school leavers (presumably successful) increased by 321.7% (figures derived from the second Plan, 1969, Vol. I, p. 22). Placed in the contexts of demography and educational policy, however, these achievements seem less impressive.

As Nyerere stressed to a 1969 TANU Conference (quoted in the second Plan, 1969, Vol. I, p. xi), "We have done very little more than expand at the same rate as the number of Tanzanian children. . . ." Thus, although the proportion of seven year olds enrolled in Standard I rose (Odia, 1971, p. 14) from 30% in 1960 to 48% in 1970, expansion was unequal, apparently peaking in about 1964 (Mwingira and Pratt, 1967, p. 66) with an enrolment of "about 55% of an annual age cohort," then dropping, according to a Unesco situation paper (Tanzania, 1973, Table II--NB that these figures are slightly different from those of Odia), to 43% in 1968 and 42% in 1969.

This stagnation--even regression--of primary enrolments with regard to population growth was, for Sochor (1970, p. 12), the result of "a deliberate policy" to favor expansion of secondary education, as the following Plan-derived and Unesco figures demonstrate when compared to those just quoted for primary expansion (1969, Vol. I, p. 22; *Tanzania*, 1973, p. 5). Between 1962 and 1968, the total secondary enrolment increased by almost 300%, Form IV School Certificate awards rose by 543% and Form VI output by 353%. Since only a tiny minority of young people entered secondary school (of the one-third of seven year olds entering primary school in 1961, only three per cent entered secondary school--Odia, 1971, p. 14), this was a policy of much education for the few.

Following Nyerere's *Education for Self-Reliance*, this policy has been reversed. According to Ministry of Education projections quoted in the Unesco situation paper (*Tanzania*, 1973, Table II), the percentage of seven year olds enrolled in Standard I is to rise to 60% in 1975, 68% in 1980, 75% in 1985 and 100% in 1989. Simultaneously, the percentage of Standard VII leavers admitted to secondary school was to taper off as follows: 13.5% in 1968, 11.6% in 1971, 7% in 1975, 5% in 1980 and 4% in 1985. Admittedly, a few will continue to receive much education, the amount as well as kind of which will be decided--as pointed out in the preceding chapter--in strict accord with manpower requirements. But if the targets for primary education can be met, or even approached, much education for the few will not have been achieved at the expense of some education for all.

The quantitative mobilization of the primary school to achieve basic education for all is more than a vague intention. It is now under way. But it is also a long-term proposition that, in the most favorable conditions, will not be fully implemented for another 15 years. The authorities have, therefore, decided that basic education for all must receive priority attention outside as well as inside the school. Launching 1970 as Adult

Education Year, Nyerere (quoted in Odia, 1971, p. 21) declared that "We cannot wait until all our educated children are grown up before we get economic and social development." Consequently, he called (quoted in Hall and Mhaiki, 1972, p. xi) for new forms of education "to reach everybody without exception."

Education outside school is not entirely new in Tanzania. Often, it has taken the form of training schemes in a given field of technical specialization tailored for the middle and upper level staff of specific institutions in the "modern" sector. Skorov (1966, p. 51) reports, for instance, that the Civil Service Training Center trained, in 1962, 1963, and 1964 respectively, 600, 735 and 1,076 civil servants, that Ministry of Community Development and National Culture centers trained 336 community development workers in 1964 and that the Ministry of Health Training Institute, the Ministry of Communications and the Ministry of Agriculture offered, during the mid-1960s, courses for similar numbers of trainees in fields like midwifery and agricultural extension.

In the time around and since 1967, this effort continued and expanded. Lewis (ed.) et al. (1971, p. 9.5) describe 44 short courses organized annually between 1966 and 1970 by the National Institute of Productivity for a total of 4,078 middle-manager and supervisory staff, and the intention (1971, p. 9.7) of the Institute of Development Management to expand its 1971 240 student capacity in management, accountacy, secretaryship and similar courses to over 1,000 by 1975. A Unesco report on *Non-Formal Education and Training in Africa* (1973, p. 3) indicates 1972 enrolments in the National Industrial Training Council's two-year vocational program and four-month upgrading courses as 160 and 1,041, respectively. Hall and Mhaiki (1972, p. 18) quote 3,220 as the 1970 enrolment figure of evening courses for employees in Dar es Salaam and 24 provincial cities.

Unfortunately, the literature provides little inkling of the extent to which such courses are covering their target populations. One may, however, venture the following educated guess, based on calculations derived from figures presented in the Unesco situation report (*Tanzania*, 1973, p. 1). The courses in question train exclusively for salaried employment and, according to the report just mentioned, "less than 10% of the labour force is engaged in salaried employment." If the labor force is considered roughly equal to half the population aged 15 and above (7.48 M) it will consist of approximately 3.74 M people, and the salaried sector will be composed of some 374,000. Projecting from the figures quoted previously, it seems likely that the number of salaried people taking part in at least short or evening courses may be in the vicinity of 7,000 annually. Figuring conservatively, then, it is not unlikely that upwards of two per cent of the salaried labor force receives some sort of middle- or upper-level training each year--a modest, if not negligible, number.

On the other hand, these calculations may be misleading since such programs do not have an undifferentiated approach to even the salaried labor force. If considered in terms of specific occupations (Lewis (ed.) et al., 1971, p. 9.7, report that the National Development Corporation enterprises employed a total of 300 to 400 managers of whom a hundred were non-citizens), even a relatively small output from such courses may be having, in certain cases, an important quantitative impact.

An important post-1967 non-formal development has been the extension of institution-oriented technical specialization training to the fringes of, or outside, the "modern" sector and to lower as well as middle occupational levels. Examples of this trend are the cooperative education program, the Rural Training Centers and the National Service.

Launched in 1965, but sharply accelerated by the increased importance accorded to cooperativism by *ujamaa* socialism, correspondence courses offered by the Cooperative Education Center have, according to Grabe (1972, p. 35), a prime intended clientele of 40,000 to 45,000 people, i.e., the roughly 25 most active members--the "member elite"--of each of nearly 1,800 cooperative societies. Enrolments up to the end of 1970 totalled some 1,340 groups involving "more than 15,000 active members in the cooperative societies, or about one-third of the target population for all courses." There was, in fact (1972, p. 30), "speculation that a saturation point has been reached [since] more than half of all societies and nearly all the marketing secretaries have had members enrolled in a study group." Moreover (1972, pp. 43-44), it was "likely that the Center is rapidly approaching full coverage of its potential clientele at the level of society secretary, with at least one [correspondence] course" per secretary.

Among its other activities, the Center is reported (1972, p. 59) to have provided "roughly . . . one training opportunity [of about five residential weeks] for every five staff members." Finally, during a 1970 cooperative education campaign, of the member elite of 40,000 to 45,000 (1972, p. 14) "an estimated 25,000 . . . participated in one or more of the [one day education] sessions" organized throughout the country.

Set up to offer short-term technical and political training to leaders of *ujamaa* villages (communal vanguard settlements organized according to the principles of self-reliance), Rural Training Centers were reported by Odia (1971, p. 25) to be training, presumably at the outset, "only 300 to 500 farmers . . . in each of the 15 RTC's annually," i.e., an approximate total of 6,000. By 1970, however, Hall and Mhaiki (1972, p. 8) state that the number of Centers had increased to 35 and the total number of trainees to 12,700. Since there were at that time some 2,000 *ujamaa* villages (Matheson, 1971, p. 26) this represents the equivalent of about six trainees annually per village, enough, in theory to have a certain impact. However, some of the villages are very large, and their adult population--about half of the some 1.3 million *ujamaa* villagers reported by Schulz (1973, p. 2)--works out to about 650,000 people. Nevertheless, if actual or potential leadership (the target population) is 20% of the adults, or 130,000, then the total RTC annual training output, based on the 1970 figure, is equivalent to almost ten per cent of possible trainees.

The National Service was created in the mid-1960s, simultaneously with civic service programs for the unschooled and drop-outs in several other African countries. After 1967, it was reshaped to serve, insofar as the unschooled are concerned, as a device to recruit and train them for a specified period of work in *ujamaa* villages. Hall and Mhaiki (1972, p. 11) quote the figure of 6,000 trainees annually. Since the total target population is unknown to me (it is probably a compromise between the vast reservoir of unemployed young people with little or no education, on one hand, and the more limited absorption capacity of *ujamaa* villages), it is impossible to estimate the relative coverage represented by this figure, except to say that it is equivalent to the processing of three trainees for each *ujamaa* village per year. It can be stated, too, that the figure is considerably larger than the numbers of young people engaged in such schemes elsewhere. The annual intake of the Kenya National Youth Service is, for example, about 3,000 (Costa, 1972, p. 63).

The National Literacy Campaign is a rather different type of non-formal program from those just described. Although sharing with them the orientation toward lower occupational levels and vocational training for work outside the "modern" sector of the economy, it has had a more diffuse--and increasingly diffuse--target population. During its experimental phase (1968 to about 1972), when it was a geographically limited program rather than a national campaign, its intention was, according to Viscusi (1972, p. 11) to make "some 100,000 rural Tanzanians [in the Lake Region] functionally literate." Vishnyakov (1972, p. 15) reports that the project grew from 29 classes with 700 students in 1968 to 4,500 classes with 150,000 students in 1971. There are, however, some discrepancies in figures appearing in various documents. Thus, the Unesco report on *Non-Formal Education and Training in Africa* (1973, p. 8) reports a 1971 enrolment of 127,000 in 4,432 project classes, while figures published in the Unesco situation report (*Tanzania*, 1973, p. 7) suggest that, in May 1971, over 375,000 adults were enrolled in literacy courses.

The difference may be due in part to the fact that while the former documents refer to the experimental project, the latter describes a nation-wide situation in which non-work-oriented literacy courses were continuing and the work-oriented program was beginning to expand into a full campaign. Whatever the reason, it seems clear that the Campaign is now under way.

Muncie (1973, p. 33) states that 1.4 million Tanzanians are now learning to read and write Swahili in the National Literacy Campaign, including (1973, p. 35) 300,000 in 10,000 classes in the Lake Region. Since the National Campaign's aim is to make literate the "more than 5,000,000 illiterate adults" (Functional Literacy Curriculum, Programmes and Materials Development, 1973, p. 1) in Tanzania, Muncie's figures suggest that enrolments account for about 28% of the target population.

A still more diffuse target group--a potential listening audience of about eight million (Hall and Mhaiki, 1972, p. 30), with an accent on rural listeners--was the framework chosen by the Institute of Adult Education for its expanding program of radio education campaigns. Combining locally led study groups, written material and weekly radio broadcasts over a period of up to three months, the program began in 1969 with a campaign entitled To Plan Is To Choose, followed by a second campaign in 1970 called It's Your Choice. Each of these reached about 250 groups (Hall and Mhaiki, 1972, p. 38).

A more ambitious effort was mounted to commemorate the tenth anniversary of Independence, in 1971, with the Time of Rejoicing campaign. Its target of at least 1,000 groups (of 5 to 25 members each) nationwide was fulfilled, since it reached some 20,000 organized participants, plus "a 'wildcat' audience [not enrolled in groups] of well over 20,000, in 42 of Tanzania's 65 districts" (Hall and Mhaiki, 1972, pp. 37, 38 and 61). Hall and Mhaiki state that this was "the biggest radio group study campaign that, to our knowledge, had been organized in Africa." A fourth campaign, organized on health education during 12 weeks in 1973, was still larger. It reached an organized audience of "nearly two million" ("Large-Scale Multi-

Media Health Education Campaign in Tanzania," 1973, p. 1), or fully one quarter of the total possible target population of eight million.

In global terms, there are discrepancies in published figures for enrolments in non-formal programs. Lewis (ed.) et al. state (1971, p. 5.7) that in May 1971 adult education "in one form or another in all 17 regions of the country" was reaching 750,000 people, while Hall and Mhaiki (1972, p. 34) quote a figure, only for community education center enrolees, of 1.3 million adults at the end of 1971--a figure they point to as "larger than the number of children in school." For all intents and purposes, non-formal programs began in Tanzania in 1961, with the creation of the Institute of Adult Education and Kivukoni College, a kind of folk highschool (Hall and Mhaiki, 1972, p. 35). But, clearly, there has been particularly great expansion of non-formal education since 1967. Vacchi (1973, p. 116), although unsubstantiated elsewhere in the literature, refers to 640,000 enrolees in literacy and other adult education classes in 1965. Since that time, the population has grown by about a quarter while the number of literacy students alone now equals more than double the inclusive 1965 figure. London (1973, pp. 440-441) says that adult education has always been important, but claims that never, before 1967, was there such a "major effort aiming to involve the whole [population] and its leaders in the development and continuation of the promotion of the adult education program. . . ." Adult education, he concludes--and his conclusion is applicable to non-formal education in general--"has ceased to be marginal. . . ."

In summary, while the general objective is basic education for all Tanzanians, formal and non-formal education play different roles in its achievement. The primary school is intended to be the chief formal vehicle for providing all Tanzanian children with complete (seven-year) basic education. But in terms of even first-year enrolment it is now reaching less than half its target population and will not attain full coverage for at least another 15 years. In the meantime, non-formal programs of four types are being used in what one author deems a non-marginal way to provide components of education--and particularly of basic education--generally, although not exclusively, to people over primary school age: adults.

The first type, aimed at the upgrading of middle and upper level salaried staff of specific institutions, is concerned with further tecnical training and is not, as such, providing basic education. It appears to be reaching only about two per cent of the salaried labor force annually--a modest if not negligible achievement. On the other hand, in certain institutional settings where skilled Tanzanians are scarce, such courses may be having an important quantitative impact.

The second type of non-formal programs has extended institution-oriented technical specialization to the fringes of, or outside, the "modern" sector served by the first type. Since it reaches the lower as well as (and perhaps more than) the middle occupational levels, it may be said to furnish elements of basic education. The coverage of this type of program varies from *fair* (ten per cent of Rural Training Centers' potential clientele appear to receive training annually and the National Service provides the equivalent of three trainees per year to each *ujamaa* village) to *good* (one-third of the cooperative correspondence course target population was reached between 1965 and 1970, there is an annual training opportunity for 20% of coop staff members and 20% of coop secretaries were reached annually over five years).

The third type of non-formal education works non-institutionally and outside the "modern" sector, with the rural masses at the lowest occupational level, and concentrates therefore on the rudimentary components of basic learning: literacy skills. Given the immensity of its target population (about 75% of Tanzanians over 15) its enrolment coverage of almost 30% may be judged good.

The final type of non-formal program has a still more diffuse audience at the less schooled levels of rural society--including many illiterates--and offers limited components of basic education (in e.g., the radio campaigns on themes of planning, health and civics). Given its massive overall target group its ability to achieve 25% coverage may be judged as good.

Education in Space: Who Shall Be Educated?

This question has been partly answered in the previous section, which described primary school's long-term reorientation to rural children and non-formal programs' target populations ranging from upper level "modern" sector management to the unschooled strata of rural society. This section views formal and non-formal education less from the vantage point of those who determine target populations than in terms of the differences--geographical, institutional, socio-economic, by age, sex and previous educational attainment--among learners that affect positively or negatively their opportunity to be educated.

Tanzania's intended shift of the focus of formal education from the cities and towns to the countryside is distinctive in two ways. First is the political impact education is meant to have. Lewis (ed.) et al. (1971, p. 5.1) point out that

> . . . most developing countries and [foreign] donors have concentrated resources [made available for non-urban education] on educating persons for service _to_ the rural areas: as agricultural agents, teachers, and university administrators.

This approach reflects the underlying conviction that the source of development, including rural development, lies in the urban power elite, and that rural development will occur thanks to the extension to the "backward" countryside, with this elite as extension agents, of the values, behavior and skills of urban "modern" sector. The approach also attests to the successful projection on the Third World of existing models of industrialization, whether Soviet Communist (cf. Stalin's and Khruschev's attempts to urbanize the countryside through the creation of state farms built around agro cities) or Welfare Statist (cf. the notion of creating a better administered and therefore more just society). But in both these models, power remains firmly in the hands of the administrators rather than of those (e.g., _sovkhozniki_ and welfare recipients) who are administrated. In contrast, Tanzania's priority goal is to enable rural people, through education among other means, to administer themselves, i.e., to take power and to move the source of development from the city to the countryside.

Secondly, unlike many other non-industrial countries, where education is provided to rural people like so much seed scattered to the wind in the hope that somehow, somewhere, it will fall on fertile ground, Tanzania has, so to speak, tilled the field beforehand by creating an infrastructure: the _ujamaa_ villages in which some ten per cent of the population now live. In line with the concepts outlined above, furthermore, the *ujamaa* villages are not conceived of as merely convenient way stations where the extension agents of "modernization" may deliver their goods and messages. They are intended, rather, to become poles of self-generating development. It was with the goal of fueling self-generating development that Nyerere declared to a 1969 TANU Conference (quoted in the *Second Five-Year Plan*, Vol. I, p. xiii) that "*ujamaa* villages and groups of villages will be given priority in . . . the location of new schools. . . ."

In broader geographical terms, Lewis (ed.) et al. (1971, pp. 4.4-4.5) note that, given an imbalanced situation where some districts count 70% enrolment in primary school and others 20%, the Government faces a dilemma in implementing its egalitarian policy, i.e., "whether to stress provision of primary schooling in areas which have been relatively neglected . . . or . . . to place more emphasis on extending education where the tradition of children in school is well established." In conclusion, they state that "although there is a conflict between equity and efficiency, the Government is pursuing a policy of equity, spreading school facilities to give reasonably equal opportunities [among] districts and areas within districts."

In socio-economic terms, primary school attendance was, before 1967, an outward sign of belonging to the privileged third of Tanzanians (total enrolment reaching less than 30% of the 7 to 14 age cohort). Predictably, Varkevisser found during 1965-1966 (1973, pp. 270-271) that her sample of rural and urban Mwanza parents displayed two extremes correlating parental status and children's schooling. Just over a third of the parents interviewed were Christian, either or both schooled, and/or had at least temporary work in the "modern" sector of the economy. 96.5%

of these parents' children were in school, i.e., a markedly higher percentage than the area average of 70% (which in turn was almost double the national average). At the other extreme were just under one third of the sampled parents who were not Christian and had neither schooling nor work in the "modern" sector. Only 31% of their children were in school.

Given the slow expansion of primary schooling, and with the probable exception of *ujamaa* villages where socio-economic differences are likely to be much less marked, the situation does not seem to have evolved greatly since 1967. The Principal of the Morogoro Teachers College told Muncie (1973, p. 17) that pupil attitudes were being modified

> . . . without changing the background of the kids, for economically and socially they aren't much different than they were ten years ago. Don't expect a revolution *there*, for still more than half the population of the country doesn't go to school.

The attitude changes, if at all general, indicate that although primary pupils' socio-economic backgrounds are not changing radically, their values may be:

> . . . the kids today feel that it is shameful not to have produced anything for themselves by age 20. I have *seen* these things [i.e., the attitude changes]. And this has been done without changing the background of the kids. . . .

Such attitudes take on even greater meaning when compared with those that appear to prevail at the secondary level, where Lewis (ed.) et al. (1971, p. 6.19) note that

> A main barrier to meaningful technical education at the secondary level continues to be the attitudes of most . . . students toward technical education, which is still seen as a second choice to general secondary education leading to university.

A certain *de facto* sexual discrimination also continues to exist at the primary level. Thus, figures derived from the second *Plan* (1969, Vol. I, p. 149) indicate that girls accounted for only 39.1% of total primary enrolment in 1969-1970, while the Unesco situation paper (Tanzania, 1973, p. 3) reports that although 37% of the primary age cohort was enrolled only 28% of girls in that cohort were enrolled. There appears to be considerable popular pressure to overcome this discrimination. Varkevisser (1973, pp. 270-272) reports that although only seven per cent of girls (compared with 55% of boys) of parents in the lower socio-economic third of her sample were in school, their mothers were particularly eager that their daughters should be schooled. Responding to such pressure, and in line with the egalitarianism of *ujamaa* socialism, the Government plans to overcome sexual discrimination. Already in 1969-1970, the *Plan* (1969, Vol. I, p. 149) foresaw that 41.6% of Standard I entrants would be girls (compared with the 39.1% of total enrolment cited above) and gradual equalization is planned, the real catching up only coming in the 1980s, however.

Although gradual, this anti-discrimination policy[1] also appears to apply to the course of study followed, perhaps particularly at the upper levels of education where priority manpower requirements make themselves most strongly felt. Muncie (1973, p. [illegible]) found that the [illegible] women among 70 first year students at the University's Agricultural College in 1972 "take the same courses as the men--no home economics majors for them."

Racial segregation in education has, as mentioned earlier, been abolished. Curiously, however, its abolition may be working against *ujamaa* socialism's egalitarianism, albeit marginally. [illegible] ([illegible], p. [illegible]) states that:

---

[1] Akwenye (1975, p. 75) calls it the choice "to discriminate positively."

> . . . in the name of a misleading [mistificante] racial integration, [certain private schools mainly serving foreigners] are also open to Tanzanian citizens who are able to pay the fees. [They are] for those with money, a complicated but possible escape route from the school system [and as such] deny the egalitarianism . . . of the Tanzanian authorities and doubtless constitute one of the weightiest criticisms one can make today of this country in the educational field [although] they are not a mass phenomenon. . . .

Non-formal education, like primary schooling, has an overwhelmingly rural bias. Hall and Mhaiki (1972, p. 63) report that 72% of participants in the 1971 Time for Rejoicing radio education campaign were peasants. To some extent, this rural orientation compensates for earlier neglect. Thus, according to Hall and Mhaiki (1972, p. 28) the Institute of Adult Education's correspondence courses were launched in 1972 "to give instruction to those who have not been able to take advantage of the possibilities offered in towns." On the whole, however, non-formal education is, like the primary school, meant to stimulate self-generating rural development. In this context and with respect to literacy work, the choice of the Lake Region for the experimental project in 1968 seems to have been made according to the criterion of efficiency rather than equity. According to Viscusi (1971, p. 13),

> The setting of the pilot literacy project is not accidental [since the pilot areas] make up one of Tanzania's best-endowed agricultural areas [with] good quantities of fish . . . high population density by Tanzanian standards and . . . a strong infrastructure of roads, schools, training institutions and cooperatives. In short this is an area where the right kind of investment . . . can be expected to pay high dividends.

The expansion of the project into a nationwide campaign appears, however, to have given increased importance to the criterion of equity.

At present the approach is to concentrate non-formal education on ujamaa villages. Hatch (1973, p. 69) reports that "many training programs give preference to the members of ujamaa villages." Lewis (ed.) et al. conclude (1971, p. 5.4) that "the significance of the ujamaa village in terms of education is that it serves as a learning center . . . through formal and many types of non-formal education." The quantitative impact that can be achieved by such a learning center within a broader development-oriented infrastructure is illustrated by the remarks of a Rural Training Center director to Muncie (1973, pp. 27-28):

> At first [when the RTC opened] the farmers in the area didn't want to come here [because] they were scattered around the countryside and not living in ujamaa villages. . . . Now [when the villages have been formed] it's difficult to accommodate everyone here at the center who wants to come [because in the villages] the people have the equipment so they can practice what they have learned here.

Rural Training Centers give priority to local leadership. According to Muncie (1973, p. 28) "village officials, elected by their townsmen, are automatically sent to the centers for training." Such leaders are by definition not of "modern" urban socio-economic background, many in fact being illiterate. Furthermore, RTC's are even more open to farmers and craftsmen, with, in 1969, 224 courses for such pupils compared with 64 courses for administrators and local leaders (Odia, 1971, p. 25). Farmers and craftsmen are selected in collaboration with other Government services for their potential multiplier effect, particularly in ujamaa villages. In general, then, RTC's cater to a new kind of local rural leadership, technical as well as political and administrative, capable of leading self-generating development and definitely not of "modern" socio-economic status.

A similar pattern characterizes cooperative education. According to Grabe (1972, p. iii), "together, the various [cooperative education programs] cover all major clientele sub-groups which may influence the development . . . of the cooperative movement." A vital function is to provide initial training, education and information to committeemen, secretaries, and active members of primary societies. Grabe notes (1972, p. 74) that

> This membership elite does not necessarily overlap with the 'educated elite' of the rural community [illegible] consists of persons at all levels of education (including persons who have little formal education or who cannot read or write).

London (1973, pp. 464-468) confirms the impression that an attempt is being made, through non-formal education, to ensure that new leadership emerges from the least privileged sectors of the population.

In terms of distinction among learners according to previous educational attainment, non-formal programs span practically the entire range of major possible cases. The completely unschooled (or those that have dropped out and relapsed into illiteracy) are served basically by the Literacy Campaign, of course, but also--as we have just seen--by the technical and administrative courses of Rural Training Centers and the Cooperative Education Center, where literacy is not an entrance requirement. In addition, the unschooled have access to programs that intentionally serve the schooled and unschooled, e.g., National Service training and the radio education campaigns. Hall and Mhaiki (1972, p. 41) state that 16.8% of Time of Rejoicing participants reported that they had never been to school.

Basic literacy is the threshold for the Institute of Adult Education's correspondence courses, which in the words of the Second Plan (1969, Vol. I, p. 158) are designed "to serve literate but isolated persons throughout the country." Similarly, and although it is not a requirement, formal but limited schooling is a feature of the profile of the average radio campaign participant. Thus, 51.8% of Time of Rejoicing group members had been schooled at a level in the Standard I to IV range, while 18% were at the Standard V to VII level (i.e., less than two per cent more than the unschooled) and all levels of post-primary schooling characterized only 13.6% (Hall and Mnaiki, 1972, p. 63).

People with a post-primary education are not, however, neglected by non-formal programs. Indeed, in addition to training of the unschooled and premature drop-outs, the National Service focuses specifically on two post-primary groups ("National Service," 1967, p. 1): students having completed Form VI, and those enrolled in any one of a variety of post-secondary institutions--including drop-outs from such institutions.

Non-formal education is similarly varied with regard to the age range of its participants. If adulthood is deemed to commence at age 15, i.e., roughly primary school leaving age (and, in economic and sexual terms it begins even earlier for many Tanzanians), then non-formal education may be considered synonymous with adult education. It appears that lower (and upper) age limits may not be applied very rigidly since, as Vishnyakov (1972, p. 15) asks: "who would have the nerve to ban a man in his sixties or a teenager under fifteen from attending . . . classes?"

Nevertheless, the bulk of, e.g., literacy students, clearly falls into the officially assigned age range of 15 to 45 (Viscusi, 1971, p. 13), selected in terms of potential economic impact through literacy-induced improvement of farming and fishing methods. This official determination seems to be spontaneously reflected in the self-selection of radio campaign participants, moreover. 76.8% of Time of Rejoicing group members were in the 16 to 45 age bracket--gradually decreasing from 28.7% in the 16 to 25 category and 26.6% between 26 and 35 (totalling 55.3% in the 16 to 35 age range) to 2.5% in the 36 to 45 group--while participants over 45 only accounted for 15.9% of the total audience (Hall and Mhaiki, 1972, p. 62). In the early post-1967 years, at least, there was difficulty in involving adults beyond their early forties since, in the words of a Nationalist editorial ("Self-Education," 27 December 1969, p. 4), they tended to consider themselves "old . . . finished" and beyond the capacity to learn. The National Service, which recruits between ages 18 and 35 ("National Service," 1967, p. 1), corresponds to an apparent general focus on young adults.

The pattern with respect to distinctions among non-formal participants on the basis of sex is less clear. In general, most programs seem to be open, in principle, to candidates irrespective of sex. The National Service explicitly recruits ("National Service," 1967, pp. 1-2) "male or (with the exception of married women) female citizens," while warning both "to avoid entering into unnecessary . . . matrimonial commitments prior to completion of their initial five months . . . training."

In practice, participation of women varies widely from program to program. In experimental literacy classes she visited in 1971, Viscusi (1971, p. 8) found that "women generally outnumbered men." Her explanation is that: "In rural Tanzania, more women than men were illiterate; also, the women assume a good deal of responsibility for agriculture, and lessons covering, say, improved cotton cultivation are not lost on them." Participation was sharply differentiated, however, in that while women did take part in vocation-based courses, a special manual (on hygiene, the home and child-rearing) was prepared for them (Hall and Mhaiki, 1972, p. 32) and special home economics courses were given for them, taught (Viscusi, 1971, p. 27) "only [by] women. . . ." The sex of the teaching force has continued, as an issue, into the National Campaign. In 1972, the Campaign's Deputy Director told Muncie (1973, p. 34) that when unfamiliar males come to teach "there are problems: the men of the village will most often refuse to allow their wives or daughters to attend because--well, you know."

Lack of differentiated subject matter may explain the Time of Rejoicing campaign's inability to attract a more balanced participation of women, who accounted for only 38% of group members. Hall and Mhaiki (1972, p. 62) say that women may not have felt the political and historical topics treated were "their domain" and also suggest that "women were less interested since the campaign stressed discussion and dialogue as a means of study."

Although Lewis (ed.) et al. (1971, p. 5.13) describe Rural Training Center courses as being attended by "farmers and often their wives." Hall and Mhaiki (1972, p. 8) report that, in 1970, only 2,500 women as compared with 10,200 men took part in RTC courses and Odia (1971, p. 25) judges it "a pity that women, who feature prominently in the rural labour force and play a significant role in farming are . . . not in a position to avail themselves" more fully of RTC facilities.

Generally, it would seem that women's participation in non-formal programs is greatest (they even being in the majority) when--as in the case of literacy--content is of immediate personal use in the home or fields and courses are not organized (e.g., with men teachers) so as to challenge the prevailing situation of male dominancy. Conversely, women seem to participate less when the subject matter or method is not (yet considered to be) tailored for them--cf. the Time of Rejoicing campaign--or when they would, as a result of--e.g., RTC--course participation, be expected to join the ranks of the new rural leadership.

In summary, the overwhelming orientation of formal--particularly primary--and non-formal education is toward the countryside. Where there has been a conflict between equity and efficiency in siting educational opportunities, equity has tended to prevail with special regard to primary schooling and--perhaps particularly since the nationwide expansion of the experimental literacy project--non-formal education. The main institutional expression of education's rural bias is the ujamaa village, which is said to be both a learning center offering opportunities for formal (especially primary) and several kinds of non-formal learning, and an infrastructure for immediate application of learning acquired.

The socio-economic backgrounds of primary and post-primary students do not appear to have changed markedly since 1967, which is understandable in view of the slow expansion of formal educational opportunities, even at the priority primary level. While attitudes of secondary students appear not to be evolving very rapidly, marked changes may be taking place in those of primary pupils. Primary education in particular, may, therefore, be helping to reshape the value structure of the privileged urban/"modern"-biased third of Tanzanians.

In contrast, non-formal programs seem to be facilitating the emergence from the least privileged sectors of the population of a new rural leadership, that does not necessarily overlap with the rural educated elite of the pre-1967 period and that is definitely not of "modern" urban socio-economic background. This leadership seems to be drawn primarily from a pool that: may be illiterate but has, more typically, an incomplete four-year primary education; is between 16 and 35 years of age; and includes, as yet, rather less women than men.

Opportunities for girls and women in formal education are planned to expand gradually, with accelerated equalization coming at the primary level--for example--in the 1980s only. Perhaps especially at the higher levels of formal instruction where manpower (and, since demand outruns supply, therefore womanpower) needs are most urgent, there appears to be little difference between what is studied, and how, by men and women. In some non-formal programs--e.g., where subject matter, teaching force and methods and/or anticipated post-training roles would be perceived, by women or men, to undermine male dominancy--involvement of women will probably also increase only gradually. But where learning offered is perceived as of immediate personal use in fulfilling one or another sex-tied role (for the individual woman qua homemaker, mother or field worker), female participation in non-formal programs has been considerable, with women sometimes constituting the majority of learners.

Education in Time: How Long and What Sequences?

While necessary, information about enrolments is an obviously insufficient indicator of the actual amounts of education received, since they refer to intentions (educators', learners') rather than results. The results, in terms of successful completions of various stages of learning, are studied here. It should be kept in mind that they do not reflect directly education's impact on society, but are, rather, merely a measure of the internal efficiency of various educational efforts.

What "careers" do learners tend to follow in the formal education system and in non-formal programs? What are the chief kinds of promotion mechanisms, and their results? What are the relationships among different stages within and between formal and non-formal education?

The absurdly dysfunctional pre-1967 system of formal education, and the alternative adopted since, are summed up by Lewis (ed.) et al. (1971, pp. 8.7-8.8) as follows:

> Historically, African universities have been at the pinnacle of the educational system. Since entry to the university also provided entry to the elitist modern sector of a society, entrance to the university overshadowed other purposes of education. The university had, therefore, a strong influence on the curriculum of the secondary schools which in turn influenced the curriculum of the primary school. The dominance of the university on the rest of the learning system is not evident in Tanzania as it is in most other developing countries . . . admission to secondary schools and to the University is based on careful manpower planning. . . . [Furthermore (1971, p. 4.2)] Primary schooling is now regarded as a complete education rather than a preparation for secondary school.

Educational policy has mounted a two-pronged attack on the old system, first reshaping the kind of education offered (as we shall see in the next chapter) and, secondly, revising the sequencing of education, with special attention to the all-powerful exam system. This multi-level revision of exams is an attempt (implemented by taking national control of the foreign-dominated exams) to break the back of the old system, vertebra by vertebra, beginning at the base of the spine: primary school.

Previously, the lowest official school leaving level was at the end of four years of primary education, at which point a selective exam determined which pupils would enter the second cycle of primary education.

If, however, retention rates during the first four Standards have been relatively good (an overall wastage of 11.8% by 1971 was noted for the 1968 first-year cohort by the Unesco situation paper--Tanzania, 1973, p. 3), the selective exam has been a massacre "associated with a drop-out rate of up to 63%. . . ." The second Plan gave priority attention to expanding facilities for Standards V through VII, with the abolition of the Standard IV exam in 1974, so as to provide a complete seven year primary education, rather than, in the words of Nyerere (quoted in the Plan, 1969, Vol. I, p. xi), "wasting money and effort by giving children four years' education and then abandoning them [when] they are likely to forget even that little which they have learned." The actual implementation of this policy--even prior to the exam's abolition--is evidenced by the fact that according to Akwenye (1975, p. 74) the number of Standard V enrolees was to more than double between 1969 and 1974, rising from 71,196 to 147,000.

Renovated primary education now ends with an examination designed, in the words of Lewis (ed.) et al. (1971, p. 4.4), "both to identify pupils who have successfully completed primary school and to assist in the selection of students for entry into secondary school." The selective function of the primary leaving exam has thus been complemented with a terminal sanction function. But it has not been abolished--the less so since the test is called the General Entrance Examination, an unmistakable reference to the further education that, according to the Plan (1969, Vol. I, p. 152), will be received by only ten per cent of Standard VII leavers. The overtly dual (not to say ambiguous) function of this examination appears to have blunted the intended effect of its reformulation to include a terminal sanction function.

Before 1967, Varkevisser (1973, p. 275) found that "In the eyes of a majority of parents . . . and pupils . . . the purpose of the primary school is to provide access to further education. . . ." The following situation was found by Wood (1969, p. 32) after 1967 in Songea District:

> . . . there is no primary school leaver 'problem' in these communities. In effect, what has happened is that 12 villages have got off the ground by their own efforts, that the young people of the villages have a tremendous pride in this achievement. . . . Why should they leave such a situation for the uncertainties of the remote towns?

This was precisely the impact the new terminal primary education was intended to have. But Wood notes that the resultant "remarkable optimism" in the area reported on was "conspicuously absent elsewhere." Bakula (1971, p. 19) reports that when his ujamaa villager sample was asked "What do you consider to be the most pressing problem facing you today?" a quarter of his respondents said "the Standard VII pupils who cannot go on to Form I," making this the second most frequent problem (after "smallness of agricultural plots").

Even the innovative nature of the examination process, remolded in line with more practical pedagogy and civic criteria, does not seem to have made marked progress in overcoming this attitude. Hatch (1973, pp. 71-72) notes that, under the new policy, "the choice of those who are going on to secondary education [is] based not only on academic achievement but also on community participation, leadership, ability, and desire to return to the community. . . ." But Vacchi (1973, p. 108) feels that

> . . . too many convergent indices show that the dislike of students for self-reliant activities [in the new pedagogy measured by more flexible exams is due] to the fear of losing precious time to devote to 'serious' studies, those that enable one to make a career in town.

Furthermore, she found that the attitude of secondary school students was "even more negative than that of primary school pupils." Indeed, it would seem that the higher the student goes in the formal system of education, the more thoroughly entangled he or she becomes in the exam/selection/promotion syndrome. The lower secondary course (Forms I through IV) is sanctioned by the National School Certificate examination, and a further two (pre-university) years are capped, after Form VI, by the National Higher School Certificate Examination. Moreover, the latter's one redeeming characteristic--its national design in line with nationally determined needs--was found by Vacchi (1973, p. 107) to elicit

> . . . indifference and resentment among young people [who deem it] a 'useless piece of paper' compared with the prestigious, and henceforth banished, Cambridge Examination. Thus one of the most enlightened and courageous decisions of Nyerere's regime [to abandon foreign external secondary school examinations] is running the risk of being annulled [in reality] by student incomprehension.

The situation at the university level also seems far from clearly reflecting new policies. Lewis (ed.) et al. (1971, p. 1.9) point out that university "entrance requirements . . . have changed little from the traditional Anglo-Saxon pattern." Some departments do seem to follow the Government's policy. Thus, the University Agricultural School's stress on practical field work in ujamaa villages is taken fully into account in evaluation and promotion. A School lecturer told Muncie (1973, p. 20) that "if students fail their field work--our faculty members here supervise all field work--they can't continue their studies here." Similarly, the technical diploma of the City and Guilds of London is being replaced, according to Lewis (ed.) et al. (1971, p. 6.6), by a diploma awarded by the Ministry of National Education. On the other hand, an official Government document (Who What Where in Tanzania, 1971 (?), p. 28) proclaims with a pride that is evident, but curious in the light of the policy of nationalizing exams, that a theoretical course was begun at Dar es Salaam Technical College in 1968 leading to Cambridge examinations in Pure Maths, Applied Maths and Physics.

On the whole, with regard to the sequencing and promotion policies and procedures of formal education, one if left with the inescapable impression that, in two ways, Tanzania's schools and university may not, to say the least, be contributing fully to the implementation of the broader goal of self-reliant ujamaa socialism. First, despite nationalization (with few exceptions), innovation (the introduction of practical and civic as well as academic criteria) and enhancement of their terminal function (particularly at primary leaving level), examinations rather than learning may be the chief concern of many or most pupils and students, and examinations still function--or are perceived to function--as selection devices for further education, i.e., more examinations. Although Nyerere has affirmed (quoted in "Nyerere," 1970, p. 5) that "the purpose of education is not to pass examinations," London (1973, p. 478) states equally unequivocally that "one of the main defects of public education [in Tanzania] is its excessive preoccupation with training students to pass examinations."

Secondly, and more serious, given the deep egalitarianism of Tanzania's ideology, the ultimate result of what Muncie (1973, p. 22) calls the "almost endless series of tests," which already seem to be creating two systems of formal education (terminal primary for the mass and several stages of further education for a tiny minority), may be a dual society. Lewis (ed.) et al. (1971, p. 417) note that rigid post-primary selection is effectively "able to minimize the problem of unemployed school certificate holders." But they also affirm that

> . . . the seeds of another social problem are being sown by placing such stringent restrictions on the number of secondary school students (2% to 3% of the age group). The differences between those few who have secondary education with jobs in the wage economy and the peasant could create a two-class society.

Vacchi (1973, p. 107) even ventures to conclude that

> The famous ten per cent of 'winners' [who go from primary to secondary school] so publicized by the newspapers, and regardless of egalitarianism and the 'unimportance' officially attached to examinations, are an elite--although chosen by new criteria of merit . . . and they feel like an elite.

In terms of sequencing and promotions, non-formal programs overlap, to some extent, with formal education.[2] In two instances, non-formal programs intentionally are fed by and feed formal education. One is the Institute of Adult Education's remedial Mature Age Entry program under which 700 to 1,000 adults with a minimum of five years previous schooling are prepared each year for matriculation to the University of Dar es Salaam (Hall and Mhaiki, 1972, pp. 28-29). The other is the National Industrial Training Program of evening courses that recruits among early school leavers, whom they prepare for trade tests, with, in 1970, an 86% course completion rate and pass rates of well over two thirds for Grade II examinees and just under one third for Grade III examinees (Lewis (ed.) et al., 1971, p. [illegible]). Where overlap exists, however, it is more often formal education that feeds non-formal learning. In some cases, there is a direct and intentional relationship, as with the National Service, which recruits directly from secondary and post-secondary institutions. Here, however, and unlike the Mature Age Entry and National Industrial Training programs, there is not necessarily any continuity between the curriculum of formal study and the non-formal course.

---

[2] The development of instruments for analyzing interfacing between formal and non-formal streams would help systematize our understanding of their relationships.

In most cases of formal to non-formal overlap, the relationship is still more tenuous: indirect and unintentional. In this connection, reference may be made to the requirement of previous literacy (presumably acquired in primary school) for entrance into the Institute of Adult Education's Correspondence Courses, and to the utility of literacy in cooperative education courses. In general, moreover, there is not even an indirect or unintentional relationship between formal education, on one hand, and non-formal programs on the other. Indeed, even within the non-formal sphere there seems to be little movement from one program to another. Participation in one radio education campaign may be followed by participation in another, but there is no evidence that it is likely to correlate with, say, joining a literacy class or Rural Training Center course. With specific reference to literacy, indeed, the opposite may be true. Viscusi (1971, p. 33) found that, having successfully completed the full literacy course

> . . . the new literate is just barely equipped to make his own way intellectually in the world of literates. The opportunities for self-improvement [through further education] are there [e.g., the Institute of Adult Education and the Cooperative Education Center]. But the new literate cannot take full advantage of these opportunities. He probably cannot read normal printed matter, write or calculate with real ease.

As a consequence (1971, p. 34) "follow-up activities are considered an integral part of literacy education. . . ."

This seems to be the characteristic pattern for non-formal programs.

While not dovetailing with other non-formal programs, much less with formal education, each non-formal program has one or more stages of learning, and tends to judge its internal success according to percentages of learners successfully completing one or several successive stages, but also places some emphasis on practical use of knowledge acquired by successful completion.

Rural Training Centers, for example, offer courses ranging from one week (e.g., for political education of village chairmen) to six months (in such skills as smithing and plumbing) (Muncie, 1973, p. 27). If individual villagers are expected, or expect, to take more than one RTC course over a period of, say, five years, this expectation is not a salient enough feature to warrant mention in the literature. Also lacking is any reference to drop-outs and learner evaluation procedures. On the other hand, writers do stress (Muncie, 1973; Odia, 1971; Hall and Mhaiki, 1972) the attempt to ensure, through selection and follow-up procedures, that skills acquired are used for the benefit of the learner's community. Thus the typical RTC pupil's learning career would seem to be: selection with a view to post-course use of skills, completion of one course (at least physical presence during full course, without dropping out), and re-insertion in original community so as to ensure use of skills acquired.

Cooperative education participants are also selected--rather, self-selected--in terms of their interest in the subject matter and their potential post-course use of new information and skills, as either coop staff or active society members. It is difficult to assess in-course promotion rates (successful completion of one mailed lesson after the other) since the organizers did not specify at the outset an expected period for course termination. Nonetheless, in one course the repeater rate ranged from a high of 25% for the first lesson to a low of 3.9% for the last lesson (Grabe, 1972, p. 67) and on the whole (1972, pp. 33-34) the drop-out rate is about 50% of enrollees, who do not finish the last lesson (no matter how many times one or another lesson is repeated), although a random sample showed (1972, p. 64) that 86 students out of 100 had finished a course in a maximum of 24 months, with the remaining 14 still actively working.

Grabe (1972, p. 33) deems the 50% overall drop-out rate "low compared to [drop-out rates] generally found in correspondence education. (Many commercial correspondence courses have a drop-out rate as high as 80%-90%.)" Moreover, he appears satisfied with course-to-course progression rates achieved by the Cooperative Education Center and the Cooperative College together, saying that between 1965 and the end of 1970 (1972, p. 45) "more than half of all secretaries of marketing societies had completed a full cycle of training consisting of one correspondence course, a two-week regional course and an eight-week course at the College." It should be noted (1972, p. 65) that course completers are awarded diplomas. Correspondence course answers are self-correcting, that is successful completion of all lessons is tantamount to a pass, but there is no information as to whether other types of cooperative courses are sanctioned by examinations.

The radio education campaigns are judged (Hall and Mhaiki, 1972, pp. 59; 61) by group attendance rates, which in the case of the Time of Rejoicing Campaign varied from ten per cent (participation in one of ten listening/study sessions) to 100%, with an average of 65%. Hall and Mhaiki feel that "this figure is very high for adult education classes [in which] class attendance is very often at a level of about 33%. The 65% rate may thus be seen as a success." Certificates were given for the completion of this campaign, but since then (and particularly in the 1973 health education radio campaign) organizers have stressed, and apparently obtained, the direct application in action projects of knowledge transmitted.

Literacy courses take place in three steps, and enrolees are expected to complete the first two and then engage themselves in the third, participation in which has, it seems, yet to be measured. One (Muncie, 1973, p. 35) is an eight month course of basic literacy skills, and step two is a second eight month course designed to bring pupils up to a literacy level equivalent to four years of primary education, while step three is the follow-up phase already referred to. Odia (1971, p. 22) reports that "the high rate of drop-outs [in literacy programs] remains a serious handicap," while the Unesco document on Non-Formal Education and Training in Africa (1973, p. 8) indicates a one third drop-out rate in the 1969-1970 phase of the experimental project and Muncie (1973, p. 35) states that 40% of pupils finishing step one do not proceed to step two.

In general, non-formal programs intermesh only marginally with formal education, sometimes feeding formal institutions directly and intentionally, but more often being fed by them, sometimes intentionally and directly, but more typically unintentionally and indirectly. On the whole, moreover, there is no overall direct and intentional relationship in terms of the sequencing and promotions of a given learner's career either between formal and non-formal education or between non-formal programs. Non-formal programs must, therefore, be examined primarily with respect to internal sequencing and promotion.

In this regard, the following pattern appears. Non-formal participants tend to be selected (or self-selected) according to their interest and, particularly, potential for immediate application of learning to be acquired. The total amount of time required to complete a non-formal course is limited to a few months at most, although it may be staggered over a period as long as two or more years. While there are almost always steps within a course (e.g., correspondence lessons, the three steps of literacy work, and radio listening/study sessions), the programs where individual learning careers appear to include more than one course or stage, making a multi-stage cycle, are few.

Drop-out rates within and between stages range from an apparent low of near zero (National Service, Rural Training Centers) to a more widespread figure of between one third and one half (literacy, radio education, and cooperative education). Some writers deem these figures high in absolute terms, but others feel they are low, or at least acceptable, when compared with similar non-formal programs elsewhere. In some cases, completion is sanctioned with such formal trappings as diplomas, but programs tend to lay special stress on facilitating retention and, particularly, immediate use of new skills through follow-up work.

Conclusions

A first conclusion emerging from this chapter is that there are fundamental divergences between the responses of formal and non-formal education to quantitative issues. Formal education has a long-term strategy that is to be implemented progressively while the non-formal sector has no overall strategy but acts in the medium- to very short-term. Formal education continues to reach chiefly students of privileged socio-economic backgrounds, whom it prepares--particularly at the secondary and post-secondary levels--for middle and upper level occupations in the "modern" urban-oriented sector; non-formal programs focus on learners of less (or least) privileged socio-economic backgrounds, in occupations on the fringes or outside of the "modern" urban-oriented sector, whom it prepares to participate in the emerging non-"modern" rural leadership. Formal education seems to be characterized by gradual expansion of female access to identical learning careers with men, but non-formal programs expand female access rapidly where learning careers for women are sex-tied.

On the whole, formal education emerges as a multi-tiered system, each sequence of which lasts several years and tends to be publicly perceived (if not officially presented) as preparing for the next, the transition being effected by passing external selective examinations, and leading ultimately to a "complete" education and access to what some observers believe to be a privileged, "modern," elite meritocracy. In contrast, the non-formal sphere appears as a collection of unrelated programs whose sequences last the equivalent of a few full-time months at most and are perceived by organizers and learners as self-contained and terminal offering components of learning of use in the life of the less privileged rural masses.

On the other hand, there are also important quantitative conver-

gences between formal and non-formal education. Both strive to offer basic education to all (primary education as far as formal schooling is concerned, and with non-formal having ceased to be marginal) and enrol from one to two fifths of their massive target populations with, however, in-sequence drop-out rates of between one and two thirds (primary and the larger non-formal efforts). Both have an overwhelmingly rural bias (particularly primary as regards formal education) and tend to be equitably located (primary, again) while (primary) focusing on a rural infrastructure--*ujamaa* villages--facilitating use of learning acquired. Both seem likely to expand female access only gradually where women and men have similar learning careers. Also, formal and non-formal education feed and/or are fed by each other in certain learning careers, although only in a small minority of cases.

Thirdly, although differing widely from non-formal education in many respects, *primary education's responses to certain quantitative issues appear more similar to those of non-formal programs than to those of post-primary formal education*. Rather like many non-formal programs, but to some degree unlike post-primary formal education, the primary school: strives to offer basic education for all, has an overwhelmingly rural bias, tends to be equitably sited, works through *ujamaa* villages, is terminal for the vast majority of its learners, and is characterized both by a two-fifths enrolment coverage of its target population and by a drop-out rate of about 50%.

A number of questions emerge from these conclusions, perhaps the most crucial of which is: Are formal education and non-formal programs in Tanzania antagonistic or complementary, concerning respective particularities (e.g., geographical focus, lengths of and relationships between learning sequences, etc.) but also, and more importantly, as regards their sociological functions in the nation? The answer may be framed in terms of actualities and potentialities.

At present, the fear of certain observers, that formal education functions as a system to train a minority elite recruited from and destined to serve in the "modern" urban-oriented sector of the society, does not appear groundless. It would seem that post-primary formal education in particular, and whatever the Government's revolutionary intentions may be, does select and prepare learners for careers in administrative and economic spheres that are still reminiscent of the "modern," urban and dependent model of development explicitly rejected by the self-reliant ideology. Since these levels of education are intentionally geared to manpower requirements of a sector whose values may still be largely incompatible with (if not always antithetical to) ujamaa socialism, a contrary situation would be hard to imagine.

Certain other features of this chapter's analysis suggest, however, that the "new elite" thesis requires, at the very least, further clarification. First is the present and apparently powerful role of non-formal education in training a new non-"modern," non-"educated" and non-urban leadership, particularly in the context of ujamaa villages' infrastructure for self-generating rural development. If, then, formal education is poisoning Tanzania with Western-style technocrats, non-formal education is furnishing a healthy antidote--admittedly a situation of direct conflict between the two kinds of education.

The picture is, however, probably not so simple. The already mentioned selection/termination ambiguity of the primary leaving-exam, and the similarities in many respects between primary and non-formal education, suggest that the primary school may become--may, in fact, already be to some extent--a means of subverting the elite-shaping function of formal education. At very least, as stated above, priority expansion of primary education means that further education for the few will not be achieved at the expense of some education for the many. More, if, today, parent and pupil attitudes toward primary education tend still to express earlier-internalized alien values concerning education and society, there are indications that attitudes and values of school attenders are evolving in the direction charted by the policy of education for self-reliance even without radical change in their socio-economic backgrounds.

Success in eliciting such attitudinal evolution will in great part depend on the kind of education offered--the subject of the next chapter. But if this ideological reshaping is successful, at the secondary and post-secondary as well as primary levels, then the "new elite" thesis may prove unfounded. Education would overturn, rather than shore up, the "modern" sector. Even before the universalization of primary education is complete, that is: while access to primary school is still largely limited to pupils of privileged socio-economic backgrounds, the successful dissemination of self-reliant values in school--parallel with the formation of a new, self-reliant rural leadership in programs outside the school--would make formal and non-formal education allies rather than antagonists.

Plan (1969, Vol. I, p. 8) had affirmed the Government's commitment "to a transformation in the content of primary education towards an emphasis on the needs of the school leaver who must make his life in rural society."

The situation has now changed. Lewis (ed.) et al. state (1971, p. 4.2) that "A new syllabus [consistent with Education for Self-Reliance] for primary education has been written . . ." and the Unesco situation paper (Tanzania, 1973, p. 3) reports "considerable progress . . . in reviewing the curricula to meet the needs of [the 90% of school leavers who terminate their formal education at the end of primary school], rather than those of the minority who proceed to secondary schools."

Hatch (1973, pp. 74, 93) describes the primary academic curriculum as including Swahili, English, history, geography, science and mathematics, with singing and art being accorded less importance. Within the academic curriculum, considerable change has taken place. In the words of Odia (1971, p. 19), "the history of Tanzania, and then of Africa, replaces Commonwealth and European history." Pointing to the new stress given to such topics as Olduvai Gorge, the great African empires and the Bantu migrations, Vacchi (1973, p. 109) notes that "with the history of the English constitution and the Magna Carta having definitively disappeared, the youth of Tanzania is learning to know its own country. . . ." In literature, too, the changeover seems to have been decisive, moving (Vacchi, 1973, p. 114) from a study of "English Literature" to a study of "Literature in English," including not only English literature but also African literature in the English language.

The shift has, if anything, been still more marked in civics classes. Vacchi (1973, p. 112) says that civics lessons (which she calls "political education") cover themes selected from African reality: "the coups d'état of the last few years, the situation in South Africa, the national liberation struggles in the Portuguese colonies, the imperialist interests of the Western powers." In addition to an Africanization of civics (as of history and literature), the lessons have been made functional. Odia (1971, p. 19) affirms that "civics . . . emphasizes the pupils' future role in the development of a socialist, self-reliant country." Localization and functionality are also the keynotes of the science curriculum which, according to Odia (1971, p. 19) "is related as much as possible to the rural environment. The animals and plants studied are those to be found in rural areas and emphasis is placed on the application of science to agriculture, health, nutrition and development in general."

The changeover to African subject matter has not always been simple. Deprecation of African ways as "primitive" has sometimes been a block. A teacher confessed to Vacchi (1973, p. 114):

> At first, when I danced ngoma . . . I was a little ashamed. I felt foolish, absurd, wearing a grass skirt and jumping up and down on the ground. I've gone through a long labor of self-persuasion. . . . It hasn't been easy. I remember that a friend's eyeglasses fell off and broke while he was dancing ngoma. It seemed to me symbolic of an insoluble cultural conflict. [All the same,] now I like to dance ngoma. I feel at ease, I am choosing psychologically.

In at least some instances, the transition does not yet seem complete. Vacchi (1973, p. 113) reports that while "an incredible number of [geography] syllabi have been proposed . . . it would be impossible to indicate a single program in nationwide use. [This is a time] of ferment, in search of new paths."

While the primary academic curriculum has been, or is being, localized and Africanized, and to some extent made more functional, in overall terms purely academic studies have been de-emphasized. Sochor (1970, p. 12) says that "the switch of stress from academic education to vocational and agricultural training is evident in various activities in schools where pupils besides basic academic subjects are taught to work in the fields." The Unesco situation paper (Tanzania, 1973, p. 3) notes that "increasing emphasis is being given to agriculture, home science and simple crafts," while Odia (1971, p. 23) refers to the inclusion of cooperative studies in the curriculum and Omo-Fadaka (1973, p. 32) quotes, among other subjects taught at the school in the village of Litowa, "water stocking, preservation of food and grain and . . . traditional artisanry techniques." Hatch (1973, p. 71) stresses the functionality of the vocational curriculum saying that primary pupils "are taught skills [and] crafts . . . which will allow them to function as active and participating members of their communities upon graduation."

The continuing priority accorded to academic study (albeit revised), and the apparently slow expansion of functional vocational study, suggest that there may be some uncertainty--or ambiguity--as to the vocations for which secondary education should prepare. The second Plan (1969, Vol. I, p. 8) did affirm that "the Ministry of National Education is now preparing means of making this shift [from arts to science and technology in post-primary education] more thoroughgoing, by gearing the higher educational system increasingly to meet the practical needs of the society." How these needs can best be met by terminal secondary education (and assuming that post-secondary education should not be the "vocation" of a large majority of secondary students) seems not yet to have been fully worked out. As in most countries, there are (two) secondary technical schools. But the

Unesco situation report (Tanzania, 1973, p. 6) points to "some lack of clarity concerning the role of these schools . . . is has been suggested that prevocational training could equally well be given by the regular secondary schools." Referring to ujamaa village manpower needs that could be met by secondary-level education, Hall and Mhaiki (1972, p. 17) ask "if the technical training institutions and secondary schools which are now oriented toward the modern sector are equipped to train the kind of specialized workers who are needed in the villages."

Some post-secondary institutions offer courses of study that are clearly practical and in line with the philosophy of self-reliance. The curriculum of the Ministry of Agriculture Training Institutes, at which extension workers are prepared in a two-year course, includes subjects such as bee-keeping; cattle, pig, poultry, rabbit and goat husbandry; the sociological, environmental and demographic causes of malnutrition; use of photography as an aid in extension work; and political education (e.g., "Qualities of a Socialist Leader") (Muncie, 1973, pp. 23-24).

On the other hand, most post-secondary education--and particularly the University of Dar es Salaam--still offers largely academic subjects. Within the context of this academic predominance, however, and aside from pedagogical innovations dealt with in the following section, there have been two major shifts since 1967. The first has been the unequivocal stress on science and technology, as compared with what the second Plan (1969, Vol. I, p. 8) terms "the traditional emphasis on arts subjects." According to the Plan (1969, Vol. I, p. 156) the number of places to be offered all Tanzanian students (including those going abroad) entering arts courses was to increase from 318 to 400 between 1969/1970 and 1973/

1974, while the number of places in sciences was to jump, in the same period, from 247 to 654. The literature does not, however, suggest that great effort has been made to ensure the adaptation of post-secondary scientific (or technological) study to the Tanzanian setting.

Rather, localization is taking place--and this is the second main trend with regard to the University--by completing academic studies in disciplines of individual specialization with courses in socio-political fields. How much this process has achieved is unclear. Lewis (ed.) et al. (1971, p. 8.5--emphasis added) merely say "efforts are underway to design a university that will support the policy of Self-Reliance," but do report that, in line with curriculum revision "to achieve this goal," required study already included "courses in development to help students understand Tanzanian socialism and their role in it." If at all generalized, the approach of the University's Agricultural School indicates that the policy of intentional complementary politicization[1] is being implemented. The School's 1972-1973 course description (quoted in Muncie, 1973, p. 19) included predictable technical titles such as soil chemistry, farm machinery and agricultural marketing, but also:

> Capitalism and Industrial Development . . . Capitalist forms of production and class systems associated with them. The economic, social and political consequences of capitalist development.
> Colonialism and its Impact: The world economy set up under colonialism and the dependent position of the third world. The changing face and continued reality of imperialism. . . . Neo-colonialism

---

[1] By "politicization" I do not imply that pre-1967 post-secondary curricula were apolitical. The courses they included (and excluded) reflected a certain interpretation of contemporary reality and option for the future, and as such were political--but in a perhaps largely unconscious way, consistent with the laissez-faire pluralism of British liberalism. In contrast, politicization is now intentional, explicitly and openly reflecting the interpretations and options of ujamaa socialism.

> implications for East Africa and Tanzania economic policy and development planning. *Socialism, Liberation and Rural Development* . . . The origins of the Soviet and Chinese Revolutions . . . the significance of Southern Africa, Cuba, North Korea and Vietnam . . . the meaning of *Uhuru* [Freedom], Self-Reliance and *Ujamaa* policy in Tanzania.

How effective is this "sandwich" approach to politicization of the curriculum? In broad terms, Packard (1971-1972, p. 75) warns that "efforts to inculcate socialist values may at times degenerate . . . to forms of 'hortatory' socialism. . . ." More trenchant, Bienefeld (1972-1973, p. 61) refers to the development of

> . . . the disastrous notions that the teaching of 'values' could be separated from the teaching of facts, or that 'political education' could be packaged in a separate course leaving other courses largely unaffected. To explicitly introduce a course on 'socialism,' or within courses a few classes on the subject, while leaving the material itself largely unchanged is to invite disaster.

In respect to non-formal education, and although courses of study differ from program to program in line with various program aims and functions, post-1967 developments appear to have resulted in something of a cleavage. On one hand are various training and upgrading schemes more or less closely allied with the "modern" sector of administration and, particularly, the economy. In 1966, a Unesco educational planning expert urged that such programs be more closely geared to manpower requirements, and said (Skorov, 1966, p. 51) that their role "in meeting manpower needs could be much greater if [their courses] were more closely related to formal education curricula and led to recognized certificates or diplomas rather than imparting knowledge of a general kind. . . ." To the extent that a few non-formal programs do feed the formal system, as we saw in the preceding chapter, this recommendation seems to have been followed. Concerning curriculum, moreover, the result appear curiously to have been to tend to design such programs in terms of formal educational thinking of pre-1967 vintage, i.e., thinking that, in principle at least, is no longer entirely valid even for the formal sphere.

According to the second Plan (1969, Vol. I, pp. 159-160), the National Industrial Training and Apprenticeship scheme offers courses in automotive, electrical, mechanical and building trades, the Program for the Development and Training of Administrative, Management and Technical Personnel provides training for clerical, secretarial, accounting and commercial staff, and the National Institute for Productivity's curricula include industrial engineering, general management, marketing and sales, personnel management, etc.

Such programs may be considered vocationally functional in that they prepare persons at different levels for work in the "modern" sector. But, for two reasons, these curricula can hardly be deemed to have been localized. First, and in this they reflect the dilemma of post-primary levels of the formal system, they mesh with manpower requirements that have not been subjected to intensive redesign in light of ujamaa socialism. Thus, they train staff who, having successfully completed their course, are presumably interchangeable with trainees in the same fields in, say, Britain. (In this way, the curricula may only be considered functional insofar as the "modern"--internationally interchangeable--sector is functional for Tanzania, an assumption that seems to have been made rather unconsciously.) Skorov's injunction to dispense with "knowledge of a general kind" seems to have resulted in the exclusion from the curricula of subjects like history, culture and civics--which are apparently considered extraneous. This extremely narrow approach, which seeks to train workers rather than educate human beings, places such curricula well to the rear of even technical courses of the formal sphere (e.g., secondary technical schools), which are more broadly conceived.

In clear opposition to this narrow, technocratic approach, are virtually all the other non-formal programs in the country, which combine, in various mixes, localized, functional (generally vocational) and civic/political subject matter, that is: that strive to train the worker and educate the citizen. In some instances, functionality is not vocational. Thus, the radio education campaigns have sought to elicit community action projects in, e.g., the health field. In others, vocational functionality is seen as having a political role in the advancement of an underprivileged group; this happens with, e.g., the courses offered by the Union of Women of Tanzania (Hall and Mhaiki, 1972, pp. 12-13). In at least one case--Kivukoni College, which (Hatch, 1973, p. 75; Hall and Mhaiki, 1972, pp. 14-15) trains political leaders in politics, economics, history and sociology--vocational functionality and political localization are synonymous.

On the whole, however, a distinction is made, and a balance struck, between localized vocational topics and localized political subjects in non-formal courses. Viscusi (1971, p. 14) reports that, in addition to teaching improved practices for growing cotton and bananas, raising cattle, catching fish and improving nutrition and health, the Literacy Campaign "also intends to develop social, political and economic consciousness" through inclusion of such topics as "Politics of your country" (for urban learners) and the concept of ujamaa village (in primers designed for peasants). The second Plan (1969, Vol. I, p. 158) specifies that the Institute of Adult Education's correspondence courses shall help persons "who wish to enlarge their knowledge and understanding particularly in subjects of importance to national development," and courses offered include (Hall and Mhaiki, 1972, p. 28) vocational topics, such as bookkeeping and administration, general studies, such as history, Swahili and English, and civics: a course on major national options.

The cooperative education program's 1970 rank and file membership campaign (Grabe, 1972, p. 14) centered on three main subjects: the marketing of agricultural produce, ujamaa villages, and the meaning and responsibilities of membership in a cooperative society. The first may be considered localized/vocational in nature, the second, localized/political, and the third, localized, vocational and political. The Rural Training Center courses display similar characteristics. Muncie (1973, pp. 27-28) found that RTC's offered such practical vocational subjects as "how not to abuse tractors . . . how to make and fix a window, a door, a chair," and that Centers adapted their subject matter to ambient conditions, with for example those in the Kilimanjaro Region stressing tea and coffee cultivation while those in Dodoma emphasized grapes and cassava. Political education focused on "four kinds of 'exploitation and their evils' (feudalism, capitalism, imperialism and parasitism). . . ." The overriding concern in both vocational and political education was functionality. An RTC principal told Muncie: "The main thing everywhere must be this: what the people learn must be applicable to . . . their daily lives."

In summary, neither the formal system nor the aggregate group of non-formal programs has been characterized since 1967 by even and thorough revision of subjects studied. The primary curriculum has shifted, in some aspects decisively, from an academic to a vocational bias, toward localization/Africanization, politicization and some degree of functionality within academic studies, and toward localization and functionality in the newly stressed vocational curriculum. Although revised in the directions of localization/Africanization, politicization and (to some extent) functionality, academic study still dominates the secondary curriculum, and vocational instruction is limited to one major subject per school, apparently because there is some ambiguity as to the priority post-secondary vocations students are expected to pursue: further study, work in the "modern" sector, or work in ujamaa villages. In the context of continuing academic predominance of post-secondary curricula, two shifts have been made. First, great stress is given to science and technology, as opposed to arts subjects, although scientific and technological study still appears to be thought of in "modern" rather than localized terms. Localization appears, secondly, in the intentional politicization of post-secondary study through complementary and at least occasionally required courses.

In the non-formal sphere, a cleavage sets off training and upgrading courses linked to the formal system and/or "modern" sector of the economy, which seem to be designed narrowly to be vocationally functional in terms of that sector, from the greater number of non-formal programs. The courses of study offered by the latter are characterized by varying but generally balanced combinations of functional, vocational and political subject matter, all treated with a strongly local bias.

Teaching Methods

Tanzania cannot be said to have designed or implemented a coherent and pervasive strategy of pedagogical revolution, in the formal or non-formal spheres.[2] As we have seen, and shall see, the central themes of Education for Self-Reliance--the goals, curriculum and organization of education--have been the overriding concerns of the makers and implementers of post-1967 educational policy. Where teaching methods have evolved, they seem to have done so empirically, pedagogical change taking place in response to a given problem or series of problems, such problems often occurring as the result of change in another area (the introduction of X subject in the curriculum or Y organizational modification requiring Z revision of teaching methods).

The alienating nature of pre-1967 formal education expressed itself in the pedagogy used as much as in other areas. Pupils lived, in effect, in two opposed educational worlds, the home (or traditional) setting and the (foreign) school. In her 1965-1967 research, Varkevisser (1973, p. 276) found, for example, a contradiction between the results of games, marketing and other methods used to teach counting and calculation at home, and school math teaching. She points to

> . . . the disappointing classroom performance of schoolchildren accustomed to mastering the spatial relations of perfectly round or rectangular huts but puzzled by diagrams of circles and quadrilaterals on the printed page. . . . Rather than leaping to any conclusion that 'African' thinking takes place on a plane of abstraction different from (i.e., lower than) our own . . . we should consider the dampening effects of the almost mechanical imposition of a foreign system of education, neglecting indigenous aptitude.

---

[2] "Pedagogy" is used here in the narrow sense of "teaching methods."

She also noted that (1973, p. 278)

> It is startling to see how easily the same children who sit for hours on their school benches without discharging a flicker of initiative, appear able, upon returning home, to shed their passivity when they shed their school uniforms and to emerge as active near-adults.

The contradiction between school and home was not, however, always surmounted (or "successfully" internalized). Varkevisser (1973, pp. 279-280) found that Standard IV pupils "lost some of their initial pride and ebullience" displayed as Standard I entrants, and refers to "instances of disturbed behavior of individual pupils and of entire classes, especially at examination time, [which] testify to the potentially destructive nature of the tensions that accumulate in school."

She attributes (1973, pp. 277-278) these troubles in good part to a pedagogy that "demands minimal student participation" and remarks that her team "observed few occasions when teachers attempted to encourage children to pose questions; [the pupils'] responsibility was more to give answers, preferably in the wordings of their texts and notes copied from the blackboard." The enforced passivity of such pedagogy, which contrasts vividly with the active experiential learning of traditional African education (described above), was part and parcel of the examination/selection/promotion syndrome. The author quoted (1973, p. 278) feels that "Rote learning is perhaps inevitable in an educational system where test-scores derived from questions based on memory instead of insight determine whether a child will be one of the envied few . . . to go on with his education. . . ."

To what extent has formal pedagogy changed? At the primary level, despite certain methodological innovations such as new math, there does not seem to have been a radical shift in the pedagogy used in academic courses. The Unesco situation paper (Tanzania, 1973, p. 3) reports that only "some 20% [of primary schools] have a practical subjects room." Vacchi (1973, p. 106) says that "truly one cannot swear that all teachers have freed themselves from the horrible habit of prizing rote learning, the stupid repetition of facts and names. . . ." The introduction of experimental learning outside the classroom has, however, been so widespread as to be nearly universal. By far the most common expression of this practical pedagogy is the shamba (field), which appears from the literature (Vacchi, 1973; Hatch, 1973; Resnick, 1971; Odia, 1971) to have been attached to almost every school in implementation of Nyerere's proposal, discussed above with reference to goals, formulated in Education for Self-Reliance.

The fact of requiring manual work during school hours is not new, as already pointed out. Nyerere himself (quoted in "Nyerere," 1970, p. 5) says that "In colonial days . . . every school had its school garden and the children were sent to work in it as a punishment--the perfect method of teaching them to hate manual labour on the land, the mainspring of Tanzania's development." What is new, is the angle from which field work is viewed. Vacchi (1973, p. 106) points out that "no longer in any case is it allowed to send [a child] to work in the fields as a punishment," and in the just-quoted reference Nyerere claims that, in the shambas, pupils "are learning by doing and they are learning about ujamaa, socialism, democracy, agriculture and self-reliance all at once."

Vacchi (1973, p. 106) calls the school field "a visible and omnipresent reality, with its successes and failures, an integral and above all non-boring part of school life." She also describes considerable enthusiasm for the school shamba on the part of educators (1973, p. 104):

> All [school] directors show it with pride; to ask one of them how education for self-reliance has been achieved is to expose oneself to interminable walks in the sun, across the fields . . . the children, they say, have done it all, alone: weeding . . . planting, irrigation; they themselves harvest and sell at the market. Their satisfaction from the results, [the directors] assure one, is enormous.

There is, however, not unanimity on the results of shamba work in terms of pupil attitude change. Vacchi herself (1973, p. 104) asks:

> But does field work please the youngsters? The answer, sometimes hesitant, sometimes frank, is 'no.' The youngsters still prefer to be in class, to read, tell stories; working the earth is hard and thankless. Does it overtire them? Yes, but it is not just a question of that . . . they are used to fatigue. The school is still understood as something that enables one to escape from the countryside . . .

such an escape being made thanks to passing exams, for which academic studies--much more than field work--prepare the pupil. The problem here seems to be triple. First, further education leading to employment in the urban "modern" sector is still the aim of many, if not all, primary parents and pupils. Secondly, despite revision efforts discussed in the preceding chapter, selection for further education still seems to be effected chiefly in function of examinations that remain largely academic.

Thirdly--and with specific regard to primary school pedagogy--there may be something of a dichotomy between what happens inside and outside the classroom. Hatch (1973, p. 72) affirms that "community involvement and cooperative work are stressed through . . . application of learning in the classroom to local problems." But implementation of this principle of two-way classroom/community interaction seems to be limited. Thus, when Vacchi asked how the policy of education for self-reliance was being applied, school directors took her to the *shambas*, not the classrooms.

At the secondary level, the situation seems to be similar although pedagogical revision may be less advanced. While the earlier exam-oriented pedagogy appears to continue more or less unregenerated in academic courses, Lewis (ed.) et al. (1971, p. 4.18) report that introduction of two types of practical experience, since a purely "academic approach rarely shapes attitudes." First is "the school functioning as a community. For example a school *may* have a farm operated in the spirit of *ujamaa*" (emphasis added). The existence of a school farm would not seem to be as widespread at the secondary as at the primary level. Nevertheless, the idea of a school community may be having more impact there since secondary education tended previously to take place in an elite atmosphere not dissimilar to that of an English public school.

The Principal of Morogoro Teachers College, already referred to, feels (quoted in Muncie, 1973, p. 16) that

> . . . there *has* been a change [since] *Education for Self-Reliance*. The students now have a respect for work. Before, the educated classes, when they came to school, would expect servants to do everything for them; they felt that all manual work was beneath them. Now, if a student couldn't find manual work to do, or if there were servants to make his bed, he wouldn't like it. He *wants* to do something for himself.

This is a far from unanimous opinion, since Vacchi (1973, p. 108) reports among secondary students "a curtain of indifference and hostility" to practical subjects that take "precious time" away from "'serious' studies." Presumably such attitudes also refer to the second innovative experience reported by the Lewis team at this level (1971, p. 4.18), the introduction of "one practical subject in each secondary school. . . . Students will be expected to produce something that can be used by the community . . . from furniture to houses."

The pedagogical pattern at the post-secondary level is, in some respects, similar to the dichotomy between academic and non-academic learning found in primary and secondary schools. In general, according to Lewis (ed.) et al. (1971, p. 8.5)

> Education methods employed at the University in preparation of high level manpower include the lecture, seminar, laboratory and independent study (i.e., traditional Western-style university pedagogy, although there are also) attempts to expand student learning beyond an academic approach to include practical experience.

One such attempt was the lengthening of the school year from 31 to 40 weeks on the understanding that "during the additional nine weeks students are to participate in practical applications of what they are learning." In some instances, there probably remains a fairly sharp distinction, perhaps even a divorce, between classroom pedagogy and field work. Such a dichotomy quite possibly exists, for example, in the Faculty of Arts and Sciences Management and Administration Programme, described by the Lewis team (1971, p. 9.3) as "primarily theoretical, providing basic knowledge mostly through lectures with very little emphasis on the development or application of skills."

Nevertheless, other programs have a much more integrated approach to theoretical and practical learning. The Institute of Development Management is reported (1971, p. 9.6) to emphasize "at the same time field in-service and on-the-job training," while the University's Agriculture School and Ministry of Agriculture's Training Institutes have broken up the traditional school year (and day), following a "sandwich" approach that integrates practical and theoretical teaching.

In each year of the three year course, an Agriculture School student spends a quarter of his or her time off campus, living and working in *ujamaa* villages or state farms, and he or she works part time, during the three quarters of the school year spent on campus, both in daily school farm chores and at an *ujamaa* village near the campus (Muncie, 1973, pp. 19-20). Ministry of Agriculture Training Institute students are selected partly on academic criteria (passes in biology, chemistry and physics courses at secondary school) and partly according to their performance during a two-month field trial period. The first year of the two-year course is divided as follows: two months field work off campus, five months on campus (with lectures and practical work each occupying half of study time), and two further months off campus (generally in a *ujamaa* village). During the second year, spent on campus, students are said (Muncie, 1973, p. 24) to "bicycle daily to neighboring farms and work for three hours with individual farmers. . . ."

The apparent success of at least some post-secondary formal programs in sandwiching periods of practical learning and theoretical instruction (the latter probably remaining traditionally academic, however) may be due to a combination of several factors. There is, first, the general trend in Tanzania toward experimental learning--a necessary precondition to successful integration, but not a sufficient one, as we have seen at the primary and secondary levels. There is also the likelihood that: since the courses mentioned are terminal and lead directly to employment, students are concerned not with further education, but with passing the courses, their "pass" depending in large part on their practical performance, and since they are already specialized, students at the post-secondary level may be perceived as having a much greater contribution to make (e.g., on a ujamaa farm) than, say, primary or secondary pupils.

As much as formal pedagogy, and perhaps more so, teaching methods of non-formal programs seem to have evolved empirically. And the evolution has not been problem-free. In some cases, devising and using adult-oriented methods has proven difficult, as when health instructors found it a "heavy task" (Hall and Mhaiki, 1972, p. 12) to relate their teaching to adult learners. In other instances, there may be a lack of integration between different stages of a program. The pattern of National Service for post-secondary students is ("National Service," 1967, p. 2) five months full-time training and nation-building activities, followed by an apparently little-related 18 months of work (and only incidental learning) in a ministry or development program, followed in turn by a final month of full-time training.

On the whole, however, and allowing for differences of degree among programs, in response to the overriding need to attract and maintain learner interest, a specifically non-formal pedagogy seems to be emerging, which harmoniously integrates and is characterized by three features (and, increasingly, a fourth). The first characteristic is variety. Although, as determined in the preceding chapter, non-formal programs are generally composed of a single, self-contained and terminal sequence, within such sequences a number of teaching techniques are used. The radio campaigns, for example: season their treatment of serious material with an unacademic "light touch" (Hall and Mhaiki, 1972, p. 40); broadcast programs involving music, messages, interviews and dramatizations; and complement the actual broadcast with printed study materials, study groups, discussion, and action projects ("Large-Scale Multi-Media Health Education Campaign," 1973, pp. 1, 12). The Literacy Campaign, in addition to instruction in reading, writing and arithmetic, gives special stress to field demonstrations (Viscussi, 1971, p. 26), work on class *shambas*, and discussion.

Grabe reports (1972, p. 42) that "The course for secretaries in primary [coop] societies has evolved over the years from an essentially academic course . . . into a comprehensive training program with many components." Sandwiching a variety of learning experiences, the two-year course for coop inspectors includes (Grabe, 1972, pp. 46-51): six months of practical experience attached to an experienced field inspector, during which the trainee must also complete two cooperative correspondence courses; two and one half months basic study (lectures, seminars, individual study); nine months of "intermediate programmed study" including practical experience in all the functions of an inspector (each trainee inspects three marketing, one consumer and one savings and credit societies, lives and works in an *ujamaa* village for at least a week, follows a court case on irregularities in a coop, etc., and submits case studies on most of his activities); and a final six months of courses, seminars (based largely on students' case studies) and practical work (running the Cooperative College's consumer store and inspecting neighboring societies and unions).

The second salient feature of the emerging non-formal pedagogy is its practicality. Even where the actual teaching is, for technical reasons, necessarily intellectual, stress is laid on practical applicability. Thus, in cooperative correspondence education (Grabe, 1972, p. 30), "the text of all courses for both members and staff is down-to-earth and practical and repeatedly invites the reader/student to reflect on the operation of his own primary society. . . ." Literacy work links the three R's to such immediately applicable skills (Viscusi, 1971, p. 7) as planting, weeding, applying insecticides and harvesting, while Schulz (1973, p. 3) notes that the attitudes of trainees at Kivukoni College changed considerably when they viewed the graphic evidence of videotaped sessions of complaining villagers. Odia (1971, p. 25) says that, at Rural Training Centers, there is an "emphasis always on practical training on the RTC farm."

The third main characteristic of non-formal methods is their stress on placing the learner in an active rather than passive role. Learning is largely experiential, inductive, sometimes (as in the two-year cooperative inspectors course, of which 15 full-time months and six part-time months are spent in actual work) overwhelmingly so. The Literacy Campaign provides time, stimulation and leadership for active participation by learners in discussion of important issues, both during courses and in special discussion groups for new (and other) literates. Participant discussion has featured prominently in various radio education campaigns, but their action-orientation has taken increasingly (particularly since the Time of Rejoicing campaign, whose evaluation led to the conclusion that radio education's "advantages . . . would be multiplied if the campaign was linked directly to an activity" (Hall and Mhaiki, 1972, p. 69)) the form of local development projects. According to a Unesco bulletin ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 12), "throughout the [1973 health education] campaign there was emphasis on action, both by individuals and by groups." Projects undertaken included clearing vegetation away from houses, killing bilharzia-bearing snails and construction of latrines. Grabe (1972, p. 30) stresses that cooperative correspondence education strives to make the learner ask himself "how he could improve [his primary society]. In other words the test [of courses] is action-oriented; the objective is to improve the ability of both members and staff to control the business of the society."

The fourth characteristic of non-formal pedagogy, group-oriented rather than individually-focused teaching, is not nearly so widespread as the three features just outlined. It is nonetheless a distinctive element of several important programs. Hall and Mhaiki (1972, p. 11) report an important shift in the Ministry of Agriculture instructional approach from a pre-1967 concentration on individual "progressive peasants" (whose intended multiplier effect was in fact practially nil) to an emphasis on group teaching. They say that this is "the best way to reach the greatest number of participants, while following the line of the Arusha Declaration and the Party's program." Thus the group approach seems to have been adopted for reasons both of efficiency (to reach the greatest number) and of equity (to reach not only individual natural leaders).

Interestingly, the group orientation directly contradicts a basic assumption of the achievement motivation trend of development thinking (one of the recent trends of the "modernization" school) according to which development occurs when key individuals are trained in entrepreneurial outlooks and skills. The efforts of Rural Training Centers (for example) to facilitate the emergence of new, non-"modern" rural leadership do not invalidate my assertion because stress is laid on trainees' collective responsibility and because post-training follow-up ensures their re-insertion into a collective infrastructure, the ujamaa village.

Group teaching has also been used in radio education campaigns. Hall and Mhaiki (1972, pp. 30-31) note that the efficacy of such campaigns is greatly enhanced when groups are organized. Furthermore, these are not merely listening groups (during the Time of Rejoicing project groups even met without a radio where reception was bad or batteries were lacking), but study groups with an animated life of their own--so groups may be said to be a learning experience in themselves. A final important aspect of non-formal group learning is that where teaching depends to some extent on written materials (the radio campaign manuals and cooperative correspondence lessons, for instance) group study makes possible the participation of illiterates.

In summary, while Tanzania cannot be said to have an overall strategy of pedagogical revolution, fairly clear patterns of teaching methods do appear to exist in the formal system and among non-formal programs. At all levels of formal education, classroom learning seems still to be carried out according to predominantly deductive methods, linked with the examination/selection/promotion function that continues to be perceived by many students and parents as the school's and university's main purpose. At the secondary and, especially, primary levels, inductive pedagogy has been widely introduced outside the classroom, both directly (in the form of experiential learning in the omnipresent school field attached to primary schools, and in the practical subjects or--occasionally--school farm at the secondary level) and indirectly (through the reorganization of the school as a community). A similar dichotomy seems to exist between still dominant academic teaching and new practical learning in much of post-secondary education (e.g., between the 31 weeks a year a typical university students spends learning theory on campus and the nine weeks he or she spends off campus in experiential learning situations), although certain post-secondary courses of study seem to have combined and balanced deductive and inductive pedagogy to offer integrated or sandwiched learning sequences.

Non-formal programs contrast markedly with at least the academic aspects of formal education with respect to teaching methods. A non-formal pedagogy does seem to be emerging, albeit empirically, and it appears to integrate successfully three major and one still minor features. It offers each learner a variety of educational materials, stimuli and experiences. Non-formal learning is practical, stressing the development of immediately useful cognitive and psychomotor skills. Thirdly, non-formal pedagogy strives to ensure that the learner has an active rather than passive role in his or her learning; it is, therefore, largely (sometimes overwhelmingly) experiential, to the point of including the productive use of skills acquired as a part of the process of their acquisition. Finally, although a less widespread feature, non-formal pedagogy tends increasingly to stress the group, rather than the individual, as the focus of learning.

The Language Problem

Linguistically, Tanzania occupies an enviable place in the polyglot continent of Africa. Viscusi (1971, p. 10) notes that "the country is more fortunate than many African countries in having one dominant African tongue [i.e., Swahili], and that Tanzanians are proud of their language, there is no doubt." To be sure, Tanzania does have, mostly in the rural areas, some 120 tribal languages whose use, according to Viscusi, "the Government does not encourage. . . ." Indeed, Vacchi (1973, p. 118) believes that one reason leading to the choice of the Mwanza region for the experimental literacy project was that the area is largely inhabited by the Swahili-resisting Sukuma. The trade-off seems to have been that the Government favored this already relatively privileged region (at some cost to the principle of equity, as already mentioned) on condition that the Sukuma accept to become literate in Swahili. By and large, however, Tanzania did face considerably less obstacles to linguistic unity than most Black African nations. How has its educational development taken advantage of this favorable position?

At the primary level, the switch from English to Swahili as the medium of instruction, begun before 1967, has been virtually completed. Odia (1971, pp. 19-20) deems the shift "a striking and far-reaching change" and points out that

> Tanzania is the only newly independent country south of the Sahara that has adopted an indigenous language as the medium of instruction in primary schools. . . . As a result, pupils learn more quickly and with greater understanding. They are more willing to participate in class discussions: they ask and answer questions more confidently and with fewer inhibitions.

Problems of materials and concepts have occurred. Cameron and Dodd (1970, p. 194) say that the correct rendering of imported terms--such as "set" and "addend" in new math--has puzzled translators. More important, surely, is the continuing ambiguity of the widespread teaching of English at the primary level. Vacchi (1973, p. 97) stresses that there is a "huge difference between teaching English and teaching in English" as the medium of instruction. But the fact remains that considerable time and effort are spent on teaching English in primary schools so that (Cameron and Dodd, 1970, p. 192) "the transition from the medium of Swahili to the medium of English in post-primary education can be more smoothly effected," i.e., a transition that only ten per cent of primary pupils will make.

Symbolic of the linguistic cleavage between primary and post-primary instruction is the fact that, as reported by the Unesco situation paper (Tanzania, 1973, pp. 4-5), Radio Tanzania broadcasts 12 hours weekly of educational programs in Swahili for primary schools while its weekly ten hours for secondary schools are in English. Some progress has been made, with according to Odia (1971, p. 20) "a few subjects . . . already being taught in Swahili at the secondary level," such as history and civics, since as Vacchi (1973, p. 100) points out, these courses are taught only by Tanzanians. Viscusi (1971, p. 10) points out that, as regards the use of Swahili at the post-secondary level, a panel of experts was looking into the matter in early 1971.

The Government is, happily, conscious of the ambiguity of the present distinction between instruction at the primary level, on one hand, and the post-primary level, on the other. The second Plan (1969, Vol. I, p. 152) emphasizes that

> The potential social implications are . . . profound; the division between Swahili education at the primary level and English education at the secondary level will create and perpetuate a linguistic gulf between different groups and will also tend to

> lend an alien atmosphere to higher education, making it inevitably remote from the problems of the mass of the society. As a permanent situation this would be intolerable. . . .

The chief obstacle to a more rapid shift to Swahili in post-primary education has been the presence of large numbers of expatriates among teaching staff. The Plan (1969, Vol. I, p. 153) provided that virtually all secondary teachers would be Tanzanian on its completion (1974), the major barrier then becoming a lack of teaching materials in Swahili.

Much freer of foreign staff than formal education (in instructional roles, at least), and apparently more able to develop materials in Swahili, non-formal programs are not marked by the above ambiguity. The second Plan (1969, Vol. I, p. 157) stipulated that "virtually the whole of this work [rural adult education] will be conducted in Swahili." This injunction seems to have been followed with, for example, all Literacy Campaign and Rural Training Center courses being taught in Swahili. More, the use of Swahili appears to have percolated upwards in at least some non-formal programs. Hall and Mhaiki (1972, p. 52) report that three quarters of teaching materials for trainers of group leaders for the Time of Rejoicing radio education campaign (that is, at two removes from the learner) were in Swahili, and that this was "something new."

Conclusions

A first tentative finding of this chapter is that, in vital respects, the quality of formal education, particularly at the post-primary level and inside the classroom, differs considerably from that of non-formal programs. Formal curricula (post-primary) are characterized by a strong academic bias and where they are vocational they are functional above all in terms of the "modern" sector. Classroom pedagogy at all levels tends: to be deductive, cognitive, academic (linked to the examination/selection/promotion syndrome); to treat the learner as passive; and to be favored by the learner (not for the intrinsic worth of learning but as a means of selection/promotion). Formal teaching takes place mostly in English after primary school. In contrast, non-formal subject matter, with important exceptions, has a strong local bias and balances functional, vocational and political topics. Non-formal pedagogy tends: to be inductive, offer a variety of cognitive and psychomotor stimuli, stress the immediate use of what is learnt, treat the learner as recipient and agent of education and to be initially favored by learners for the intrinsic value of what is learnt. Almost all non-formal teaching is in Swahili.

On the other hand, there are, in qualitative terms, clear similarities between primary schooling and most non-formal programs (both have strongly vocational, localized and politicized curricula; stress--outside the classroom, for primary school--inductive, varied, practical and learner-activating pedagogy; and take place in the medium of Swahili), and between post-primary formal education and a few non-formal efforts (particularly regarding vocational functionality defined narrowly in relation to the "modern" economic sector).

There seem, on the whole, to be two kinds of education in Tanzania, each having formal and non-formal components. On one side, is a system of education for the "modern" sector, including the perceived selection/promotion function at all levels, the secondary vocational curriculum to the extent that it prepares for further education or work in the "modern" sector (as opposed to, say, *ujamaa* villages), the post-secondary curricular shift to science and technology, the classroom pedagogy at all levels, the continuing (albeit decreasing) predominance of English as a subject in primary schools and as the medium of instruction at the post-primary levels, and certain non-formal training and upgrading programs linked to the "modern" sector.

This first kind of education, overwhelmingly formal but with the non-formal adjuncts just mentioned, could most charitably be called *indirect education for self-reliance*. It is education for self-reliance insofar as it obeys the single overriding goal of achieving independence of expatriate manpower in all but a few economic posts at the earliest possible date. In important ways, however, it seems to contradict both the policy of self-reliance and the ideology of *ujamaa* socialism. Its stress on science and technology that do not appear to have been re-thought in Tanzanian terms, its deductive/cognitive/academic/learner-passive classroom pedagogy, its continuing use of English and its still-perceived selection/promotion function all tend to replicate and perpetuate the models of society and education that dominated previous to 1967.

The second kind of education, including almost all non-formal programs but with important components at the primary and (somewhat less) post-primary levels, may be called *direct education for and in self-reliance*. It is education *for* self-reliance inasmuch as the subjects studied, in and out of school, are localized, politicized and functionalized in terms of self-generating rural development. It is education *in* self-reliance in that its pedagogy (outside the classroom, as regards formal instruction): is experiential, mixes a variety of stimuli, is practical, makes the learner an agent as well as recipient of education, and takes place in Swahili.

It will be seen, then, that although unintentionally (since not reflecting an aggregate non-formal strategy) a learner in non-formal programs seems in general most likely to receive an education qualitatively and consistently for and in self-reliance. His curriculum is liable to display a balance, with a strong local bias, of functional, vocational and political subjects; his pedagogy is most probably inductive, varied, practical and learner-active; and he learns in Swahili. In contrast, a learner in the formal stream (even at the primary level) seems likely to receive two educations, one for and in self-reliance, and another that appears to contradict self-reliance and ujamaa socialism in important ways. His curriculum is localized yet he learns (or learns in) English; it offers teaching in rural egalitarian and communal socialism, yet the classroom pedagogy remains authoritarian, and he may well come to feel that the opportunity afforded by education is to facilitate his individual rise to a privileged station in the urban-oriented "modern" sector.

In conclusion, it would seem that education for self-reliance has made most qualitative progress in non-formal programs, the majority of which are oriented in the same direction as *ujamaa* socialism: toward egalitarian and self-generating rural development. In formal education, the implementation of self-reliance has led to important qualitative strides in reshaping the curriculum, in offering psychomotor as well as cognitive learning outside the classroom, and in shifting from English to Swahili as the medium of instruction. Nevertheless, many aspects of formal education still seem at variance (when not in contradiction) with education for self-reliance.

CHAPTER V

RESOURCES FOR EDUCATION

Educational renovation is often delayed or abandoned because of a perceived lack of resources. Poor countries in particular tend to see themselves as caught in a vicious circle. To achieve economic development they need more education, but to offer more education they need economic development. A distinctive feature of the policy of education for self-reliance is that, although Tanzania has an annual per capita income of about US $80 (Matheson, 1971, p. 27) and has been listed by the United Nations as one of the twenty-five "least developed countries," it has embarked on a process of revolutionary educational change. This fact suggests that Tanzania must view and treat resource constraints differently from other non-industrial (and industrial) countries.

Looking first at non-financial resources, what kinds of human resources does Tanzania mobilize? What kinds of equipment and other material resources? How does it deal with buildings and other issues of plant?

Human Resources

Who is teaching? Who is helping the teachers? Who is administering teachers and helpers? Insofar as information is available, answers may be sought to these questions under the following headings: recruitment of human resources, training, teacher:learner ratios, responsibilities, and status.

Although rapidly evolving since 1967 and therefore somewhat confusing to the external observer, teacher recruitment policy and measures in formal education seem to have clustered around two priorities. First, according to the second Plan (1969, Vol. I, p. 153), is to supply as many primary teachers at grade A level, the pre-training entry requirement being a successful education up to and including the Ordinary Level secondary examination, as necessary to expand existing primary education from a four to seven year terminal cycle, a policy already discussed. As a stop-gap measure, Grade C teachers (training entry requirement is a completed primary education) are being widely used. The Lewis team (1971, pp. 4.8-4.9) report no lack of candidates at either level with, in 1970, 25,700 applicants for 600 Grade C places. Interestingly, preference was given not only to those who had completed National Service (i.e., received non-formal training) but also to candidates who had served as volunteers in adult education programs (i.e., taught in a non-formal setting).

Secondly, the above-quoted Plan projection gives stress to "early localization" of teaching staff at the secondary level, and spectacular progress seems to have been made toward achieving the ambitious Plan aim (1969, Vol. I, p. 151) of ensuring that 98% of secondary teachers would be trained citizens by 1974. Figures from the Plan and the Unesco situation paper (Tanzania, 1973, p. 5) indicate that the stock of trained Tanzanian school teachers jumped from 15% of the total force in 1967 to 47% in 1969/1970 and 62% in 1971.

Little use seems to be made of non- or paraprofessional teaching staff in the schools. Hall and Mhaiki (1972, p. 20) do indicate that parents take part in certain cultural activities, "teaching [the children] traditional songs and dances and local handcrafts," these being, however, apparently extracurricular. Peer-teaching, moreover, seems to be conspicuously absent. Indeed, if as I have already suggested the pre-1967 classroom atmosphere has changed little, cooperation is probably not one of its main features. Varkevisser (1973, pp. 278-279) notes a contradiction, on this point, between traditional home education in which "as soon as they themselves become experienced practitioners of a certain task, children become the teachers of their young siblings" and the classroom where she noted "little cooperation, not even among those who shared a text book [and] a high degree of competitiveness. . . ."

On the whole, then, the emphasis in formal education is on rapid expansion of the professional corps of professional teachers. The Principal of a (post-secondary) Ministry of Agriculture Training Institute epitomized this option when he told Muncie (1973, p. 25) "we need . . . especially more qualified teachers. We've had to use some assistant field workers here to give lectures and though some of them may be good, it's not enough."

Reading between the lines of statements such as this, one might assume that training for "more qualified teachers," e.g., to give better lectures than non-professionals, would follow a fairly classical pattern, stressing the academic, deductive and cognitive pedagogy discussed in the preceding chapter. This may hold true to a degree, but the main highlights of recent teacher training seem to have been markedly innovative.

A striking aspect of efforts in this field is their massive nature, building to some extent on pre-1967 quantitative efforts. Standard full-time courses have undergone considerable expansion and reshaping, with increased time being allotted to more varied and more practical studies. Equally--perhaps more--important are the large-scale in-service guidance and training programs that have begun. Lewis (ed.) et al. report (1971, p. 4.7) the existence of a nationwide network of itinerant teacher trainers who, according to Berlin (1972, p. 3) are responsible for retaining some 12,000 teachers (apparently during the *Plan* period) while the Lewis team states that the inspectors' function has "changed from merely criticizing to . . . supervising and assisting teachers."

Similarly renovated is the content and, apparently not to a lesser degree, pedagogy of post-1967 teacher training. The Lewis team (1971, p. 4.10) noted that

> There is a new look in primary teacher education consistent with *Education for Self-Reliance*. The meaning of *ujamaa* is stressed in academic studies. . . . There is an emphasis on such practical subjects as farming, woodwork, home economics and crafts. Each student has experience with each of these subjects; in addition, he is expected to develop proficiency in at least one skill.

A special Education Orientation Center, at Bogomoyo, is reported by these authors (1971, pp. 4.7, 4.15-4.16) to supplement political instruction with "four-week orientation courses to train the teacher to find theoretical and practical ways to implement *Education for Self-Reliance*' including thirds devoted respectively to political education, teaching methods and "practicing for self-reliance by caring for the school farm." The Center already enjoys sufficient facilities (although their five-fold enlargement was planned) to accommodate one-fifth of all primary teachers at one course each five years. This political priority is consistent with the policy announced in a teachers college prospectus quoted by the

Lewis group (1971, p. 4.23) according to which "a teacher's diploma can be awarded only to those who are deemed competent to socialize the young as the national ethic demands."

An aspect of the new teacher training that is particularly germane to the present study is the requirement instituted in 1971 that all primary school teachers receive grounding in adult education methods, although Viscusi (1971, p. 38) notes that even with such training teachers would require "minimal [additional] training before taking over [literacy] classes."

It is not clear to what extent the measures just outlined apply to training of secondary school teachers, although innovation at this level seems to have lagged behind the pace of change (if not quantitative achievement) at the primary training level. Lewis (ed.) et al. (1971, p. 4.23) describe the courses leading to a graduate teacher's diploma as being typical B.S. or B.A. programs with education merely taking, obligatorily, the place of an elective. The program was, however, being revamped so as to increase the number of science (as opposed to the then dominant) arts majors, and to give more place to practice and its link to theory. One wonders if more radical action will not be necessary to overcome what the authors just quoted (1971, p. 6.9) term a "main barrier to meaningful technical education at the secondary level [i.e.,] the attitudes of most principals [and] teachers [of Technical Secondary Schools] toward technical education. . . ."

Primary school pupil:teacher ratios, according to the Unesco situation paper (Tanzania, 1973, Table III), ranged in 1971 from 51:1 in Standards I to IV to 39:1 in Standards V to VII, and were not expected to change markedly by 1985, the respective projections being 45:1 and 40:1. The Lewis team (1971, p. 4.6) call the overall primary ratio of 44:1 "high [and it] suggests some classes of as many as 55 pupils." Given the high percentage of minimally trained teachers (70% to 80%), and despite widespread in-service upgrading, they concluded prudently that "the combination of large classes and poorly trained teachers can produce a mediocre or poor education." At the secondary level, the above-mentioned Table of the Unesco situation paper indicates that the overall 1971 19:1 student:teacher ratio is not expected to change by 1985, while post-secondary classes appear to be even smaller. Lewis (ed.) et al. note that the 7.5:1 ratio in 1971 was only expected to move to 8:1 in 1974, for example.

This state of affairs, and its projected evolution, is all the more unfavorable to the primary level since, in addition to responsibilities that are changing and expanding in line with the implementation of self-reliant activities outside the classroom (and the stresses that probably result from the already-discussed dichotomy between these and academic classroom work), primary school teachers are also expected to teach adult education in line with what Viscusi (1971, p. 25) calls "an unequivocal directive to teachers" issued in 1971 by the Ministry of National Education. To be sure, it was foreseen that teachers would be released from formal education for three periods (six hours) a week for such non-formal activity. But it seems unlikely that conscientious teachers would really devote much less attention to an already overloaded school schedule. Thus, whether teachers were conscientious or not, this measure may be having counterproductive effects in at least some instances.

One wonders if there are not two conflicting visions of the primary teacher's role. According to the ideal, he or she is becoming a multipurpose educational resource person, eliciting theoretical and practical learning of self-reliance among children and adults alike. According to Hall and Mhaiki (1972, p. 20) "each primary school is to become an education center for children and adults (Community Schools), and the teachers are the same for both groups." On the other hand is a pessimistic view, in which, despite training innovations, and as much because of the variety and number of his or her tasks and learners as on account of the weight of earlier classroom pedagogy, the teacher continues in the role described by Varkevisser (on the basis of pre-1967 research, 1973, p. 278):

> They fail to harness the learning energy latent in their young students' proven self-reliance [demonstrated in traditional self-educating and peer-educating activities]. Instead, their authoritarian stance induces regression, battering students back into a state of dependence.

The status of schoolteachers, particularly at the primary level, seems to be going through a transition period. Vacchi (1973, p. 98) maintains that there is

> . . . a flight from the profession toward more attractive jobs in government and politics [resulting from] a degradation in the status of the teacher: once the only educated person in the village, an important and respected personage, he has little by little been overtaken by the new political and economic elite. . . .

Viscusi, on the other hand, views the rural teacher (1971, p. 27) as still belonging to the elite: "Even in non-elitist Tanzania, primary school teachers undeniably constitute a privileged group [in an] honoured profession [with a] steady income." It would seem, on first sight, that rural primary teaching occupies a declining, albeit still important, place in the hierarchy of the "modern" and urban-oriented (if not always city-based) socio-economic sector of the population.

In fact, their situation is probably more ambivalent. Viscusi notes that teachers are "well aware of the larger world [and] know they have been trained for a task of vital importance to national development." Such attitudes could characterize the service-oriented professions of the modern sector. Judging from the reaction of Vacchi, who is highly critical of other aspects of Tanzanian educational development, it would seem (1973, p. 99) that teachers have not only such a professional *esprit de corps*, but also a view of their profession that is consistent not with the philosophy of a "modern" sector technocrat but with the policy of education for self-reliance.

> I found not a single teacher who did not have clear and frank opinions about the problems and prospects of the school; not one who did not feel it necessary to work in this direction [of educational improvement] with all his might, and who did not show this through enthusiasm and work; not one who was unaware of the discussions that followed the publication of *Education for Self-Reliance* and who didn't have a personal opinion on the subject.

Vacchi explains this commitment as being due (1973, p. 100) to the fact that

> . . . in contrast with many other African countries . . . the teachers are not prohibited from taking a public interest in politics, so joining the Party and being militant are encouraged. Thus they do not feel excluded from national life and its decisions in all sectors.

The attitude changes are practical as well as theoretical. The long-time principal of a teacher training college explained to Muncie (1973, p. 17) that:

> In the past . . . I would talk to [in-service trainee teachers] about Charles the Fifth or someone like that and when I finished,

> I would ask for questions. They would . . . ask questions like 'Why do Grade B teachers get paid so much less than Grade A teachers?' Now, they ask for books or nails so that they themselves can make repairs on their schools with the help of their students.

For the present, then, primary teachers should probably be considered to belong to both the "modern" urban-oriented sector (in terms of socio-economic status, if not of attitudes toward their profession) and to the emerging non-"modern" rural leadership (in terms of attitudes if not socio-economic status).

This transitory ambivalence may be explained in part by the measures taken with regard to formal education's administrators since 1967. Prior to 1967, the functions of school inspectors, district education officers and other non-teaching staff (described for example in Mwingira and Pratt, 1967, pp. 25-26) were fundamentally to administer the then existing educational system, i.e., a system that served almost exclusively to cull and recruit for the "modern" sector. Since 1967, the rural school has become (in theory at least) a multipurpose educational center serving adults as well as children with non-formal programs in addition to schooling. Commensurate with this re-orientation, educational administrators have become agents of change as much as guardians of stability. The second Plan (1969, Vol. I, p. 157) specifies that "the general responsibility for adult education activities of the [multipurpose] centre will rest with the headmaster," whom Odia (1971, p. 21) describes as having the duty to "select suitable teachers and arrange classes" for non-formal courses. Thus, like the primary teachers, educational administrators may be characterized by a certain transitory ambivalence. On one hand, they administer a formal instructional system (particularly inside the classroom) that is linked, or at least perceived to be linked, through selective examinations and promotion, to further education and the "modern" urban sector, and in this role they are chiefly custodians of continuity. On the other hand, they are responsible for ensuring the implementation of innovations based on education for self-reliance, both through the creation of formal education outside the classroom and through non-formal programming, such innovations being linked to the emergence of new rural leadership; there they are agents of change.

Lewis (ed.) et al. (1971, p. 1.10) point to "the shortage of administrative and managerial personnel [as possibly] a more serious constraint on building the learning system than the availability of financial resources." Because of the number and divergent nature of tasks implied by their double role, it is possible furthermore that educational administrators--as much as primary teachers--are subject to considerable stress. The Lewis team concludes that, with regard to innovation in rural education, "without any question, Tanzania has demonstrated its superior competence in the 'design of development.' Its 'delivery capacity' at local levels is still underdeveloped."

Because of their maturity and in light of less authoritarian pedagogy, adult learners in non-formal courses appear in some instances to be thought less in need of teachers than school pupils. For example, with respect to cooperative correspondence study, Grabe (1972, p. 70) indicates that each village-level "study group is a leaderless, not a tutored group. No one has all the answers." On the whole, however, non-formal programs do have some form or other of instructional leadership. Indeed, the non-marginal quantitative importance of such programs is underscored by the fact that, in 1971, there were according to the Lewis team (1971, p. 5.7) some 22,000 adult education leaders, i.e., a number almost as great as the total stock of primary school teachers that year (22,270) reported by Hall and Mhaiki, 1972, p. 24). Although there was some overlap, these were far from identical groups.

The second Plan (1969, Vol. I, p. 157) stressed that, regarding the expansion of adult education, "the main limiting factor is the scarcity of experienced staff." As a result, recruitment reached into but also outside the pool of teachers. The Plan foresaw that leadership would be provided by all individuals "who are competent to give instruction. . . ." This included civil servants and other individuals with sufficient schooling to place them at least at the threshold of the privileged "modern" strata of the population. Much more significant, however, is the fact that, as Odia notes (1971, p. 21, emphasis added): "All educated or qualified persons . . . are expected to assist" in leading non-formal programs.

The "or" is significant in that it opens the door of non-formal teaching responsibility to those who are not only not professional teachers, but who are not professional or credentialled at all according to "modern" sector criteria. Hatch (1973, p. 74) reports that "primary students [and] fellow workers" in the countryside are mobilized, while the Unesco situation paper (Tanzania, 1973, p. 7) indicates the Government's intention to tap the pool of "villagers with special skills and talents" for teaching in the multipurpose Community Education Centers. Detailed information given by Hall and Mhaiki (1972, p. 64) indicates that the typical Time of Rejoicing group leader was male (98%), between 16 and 35 years of age (probably between 21 and 25), had completed a standard above Standard V primary education (though 24.4% had a level between Standard I and IV, and 3.3% had never been to school), and was only a little less likely to be a peasant (40% of leaders) than a teacher (46.7%). Campaign evaluators drew the conclusion that "group leaders need not necessarily have attained a higher level of schooling than [participants] to be efficient. . . ."

Such a profile does not seem uncharacteristic of other mass efforts in the non-formal sphere. The National Deputy Director of the Literacy Campaign told Muncie (1973, p. 34) that "We *try* to get someone from the community itself to teach the classes. . . . That way instruction will be better accepted by the people." Viscusi (1971, p. 25) notes that, in the experimental project, at least half the instructors were not professional teachers. Non-professional volunteers took a "written test which measures their general knowledge and facility with mathematics" and were asked to teach six hours a week for two years. Most volunteers had completed primary school, but some had dropped out after Standard V. They were generally (1971, p. 27)

> . . . able-bodied and articulate young men unable to find permanent employment, [with] firsthand experience of the degrading effect of illiteracy [and were] personally more indignant about social conditions in rural areas and less satisfied by current efforts to improve these than primary school teachers [and] eager to teach. . . .

In addition to adult education leadership training now required in teacher training colleges, training of professionals for non-formal education is offered by the Institute of Adult Education in a one-year diploma course at the University. Aimed at cadres already working in the field for various ministries and other agencies, the course stresses practical aspects--and actual practice--of adult education (Hall and Mhaiki, 1972, p. 25) and also includes political instruction (London, 1973, p. 439).

Impressive training efforts have extended to the non-professional volunteer leaders. Hall and Mhaiki deem (1972, p. 51) that the "training of study group leaders was an extremely important factor for the success" of radio education campaigns. In what they call "a gigantic task" (1972, p. 45) nearly 2,000 leaders were trained for the Time of Rejoicing campaign in subjects including group learning methods (contrasted with classroom instruction), organization of a meeting, sources of books and project administrative procedures. The method used was group learning since trainees would be using this method themselves.

The training strategy used in radio campaigns is a three-tier pyramid. During five months prior to the 1973 health education campaign ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 12) the following activities took place: seven orientation courses were held for 18 regional training teams, which in turn ran some 70 seminars in all of Tanzania's 63 districts for district-level training teams, which in turn organized about 2,000 two-day seminars to train over 70,000 group leaders. In the end, each group leader appears to have received almost as many training hours as the leading hours he or she was expected to give.

The training of literacy instructors has followed a like approach, being intensively practical in content and methodology and multi-tiered in organization. Viscusi (1971, p. 26) reports that training content focused on three points: down-to-earth concepts ("What is money? What can you do with money? How can you get the most money for [e.g.] your cotton? Why is ridging (or any other improvement) recommended?"); understanding of pupils (all adult "learners must understand what the words they read mean" and trainees were "reminded again and again that they are teaching adults, not children. . . . Patience and courtesy are . . . urged on them, and they are told never to mock an adult learner"[1]), and active pedagogy ("A major part of [instructor] training is devoted to conducting demonstrations. . . ."). Viscusi notes wryly that "For many [school] teachers mastering this [practical, pupil-oriented and inductive] approach requires a complete reorientation about what it is to teach." Training is tiered and decentralized, with Campaign staff giving two-week training to interdisciplinary training teams, which in turn train primary teachers (four-day courses) and volunteer instructors (two-week courses), and later offer in-service training (Lewis (ed.) et al., 1971, p. 5.10).

Calculations based on figures quoted by various authors strongly suggest that learner:leader ratios have improved considerably in non-formal programs since 1967. According to Vacchi's figures (1973, p. 116) it would appear that the gross national learner:leader ratio in 1965 was 58.1:1, while, for the Lewis team (1971, p. 5.7), the same ratio in May 1971 was on the order of 34:1. In-program ratios also compare favorably with, say, the situation in primary schools. Figures referred to by Viscusi (1971, p. 25) indicate that the enrolee:leader ratio in 1971 literacy classes averaged 33.1; taking a high drop-out into account the actual learner:leader ratio was better. The (leaderless) cooperative study groups are said by Hall and Mhaiki (1972, p. 10) to involve ten to fifteen participants each, while Odia's figures (1971, p. 25) suggest that the average Rural Training Center course is composed of about 26 participants, presumably taught by at least one leader. Learner: leader ratios in Time for Rejoicing study groups (Hall and Mhaiki, 1972, p. 56) varied in size but averaged 16:1 for the country as a whole, which is acceptable since these authors feel (1972, p. 59) that discussion becomes "difficult to lead with more than 15 people. . . ." Figures from "Large-Scale Multi-Media Health Education Campaign in Tanzania" (1973, p. 12) imply, however, that the overall national learner:leader ratio was rather higher, i.e., 28.5:1.

---

[1] From these injunctions it does not seem mischievous to assume that the teacher of children is perceived as someone who tends to be impatient, discourteous and mocking with his young charges.

With regard to leader responsibilities, it is difficult to judge whether non-formal instructors are overloaded or not. In absolute terms, learner: leader ratios compare favorably with primary school figures, and it may be said, too, that there is probably little if any misunderstanding as to the function of programs and a consequently low level of stress (as opposed to the contradictory interpretations of, say, primary schooling). On the other hand, stress may arise from a latent conflict between differing perceptions of the teachers' status. We had already examined the possible ambivalence of roles of primary teachers engaged in non-formal instruction. One wonders if a (probably lesser) degree of reverse ambivalence does not characterize the status of non-professional" volunteer leaders.

The profiles described above as typifying such mass programs as radio education and literacy would seem to place non-formal instructors squarely in the new non-"modern" rural leadership. But the very fact of acceding to responsibility and recognition in teaching may lure them toward seeking status in the "modern" urban-oriented sector with which teaching has usually been associated. Viscusi (1971, p. 27) notes that while literacy instructors receive a modest honorarium, they

> . . . know an honorarium is not a salary; it cannot erase the stigma of being unemployed [and they] desperately wanted some form of official recognition, some token that . . . they have gained professional status of sorts. [Irregular arrival of the symbolic honorarium caused one teacher to say:] "My wife and friends say: 'you told us you would be earning something for being a teacher but what you are doing can't be worth much because you haven't been paid.'"

The general impression emerging from the admittedly scarce treatment by the literature of managers and administrators of non-formal programs is that the cadre is, on the whole, sufficient and adequate. Viscusi refers to initial problems with the staffing of the literacy evaluation unit, but by 1973 a Unesco project document ("Functional Literacy Curriculum, Programmes and Materials Development," 1973, p. 4) was able to affirm that "existing manpower and organization are capable of coping with the needs of the project. . . ." Flexibility has been an important feature of non-formal administration staff, expressing itself through decentralization (e.g., the itinerant wings of the Cooperative Education Center (Grabe, 1972, p. 13) and the stress given to the importance of supervisory visits to radio education study groups (Hall and Mhaiki, 1972, p. 60)) and in the use of non-professionals (such as the short-term employment of students for literacy test administration (Viscusi, 1971, p. 30)).

In summary, human resource recruitment policy in the formal system appears to be attaining the aims of staffing extended terminal primary schooling and localizing secondary staff while maintaining credentialled professionalism. Teacher training is expanding rapidly and features (particularly at the primary level) a massive and decentralized approach. It stresses political and practical preparation as well as universal training to do non-formal teaching, emphases that are changing the very concept of professional teaching. Pupil:teacher ratios are stable and high at the primary level, and stable and low at the post-primary level, leading to possible overload at the primary level, particularly in light of the additional and possibly stress-causing instructional responsibilities outside the classroom. There is probable ambivalence in the status of teachers, particularly at the primary level, since they are of the "modern" urban-oriented population in terms of socio-economic status and educational achievement while at least tending toward attitudes to their profession that are consistent with the needs of the new non-"modern" rural leadership; they are thus simultaneously guardians of "modern" stability and agents of self-reliant change. There seems to be a serious shortage of administrators of formal education, who may also be subject to some ambivalence of status.

Massive recruitment appears to be overcoming shortages of non-formal leaders, thanks not only to the universal inclusion of non-formal leadership among tasks of primary teachers but also (and particularly) to the massive mobilization of non-professional--including little-schooled--

leaders according to pragmatic criteria rather than credentialism. Professional training in non-formal education is required of teachers and offered to a number of other cadres, while training that is practical in content and method has become massive and decentralized for non-professionals. Learner:leader ratios in non-formal programs seem to be improving and generally acceptable, which, coupled with the unambiguous function of leader responsibilities, probably results in little overload or stress. On the other hand, ambivalence seems possible in leader status: while of non-"modern" socio-economic status and general attitudes (e.g., favorable to self-reliance) at least some leaders seem to aspire to attain a semblance of "modern" professional status through their teaching function. Administrative staff of non-formal programs seems, on the whole, to be adequate and appears to be characterized by flexibility.

Material Resources

What written materials are used by Tanzanian educators? What teaching equipment? What educational media?

Lack of printed materials was a prominent feature of the pre-1967 resource situation in Tanzanian schools. DeJongh (1969, p. 14) reports that in his Sukumaland sample "even the teachers themselves had difficulties in obtaining enough materials to preserve or improve their skills." Moreover, the language and content of texts were little suited to the Tanzanian situation. Vakevisser (1973, pp. 276-277) points out that math books were "written in far too academic English [and were] wholly British in orientation" while language textbooks were "full of stories involving incidents and objects unfamiliar to African children and [posed therefore] comprehension questions which require little thinking but memorization. . . ."

This situation has not changed radically. The second Plan (1969, Vol. I, p. 153) warned that the lack of Swahili language texts "cannot be made up overnight; it will require a systematic programme of translation and creative writing over some years." Lewis (ed.) et al. concluded (1971, p. 4.6) that "a shortage of funds for materials . . . suggests that poorly trained teachers have relatively little materials as they cope with large classes."

In terms of quality, much of the printed material used at different levels of formal instruction remains alien in origin and/or approach. Lewis' group (1971, p. 9.3) noted, for example, that although a University undergraduate management training course covered such areas as East African society and environment, and an introduction to political economy, it had to rely "almost exclusively on English and American textbooks and teaching materials." Vacchi (1973, p. 111) recalls how

> . . . a young and brilliant history teacher told me: 'I tell my kids: in place of the word aid put profit. . . . In place of victory, put massacre. And you'll have the truth about African history.'

She also affirms (1973, p. 110) that "some schools . . . still use the old [history] texts published at the beginning of the 60s [which are] full of racist nonsense." In the 250 page book An Introduction to the History of East Africa by Z. Marsh and G. Kingsworth, for example, Vasco de Gama arrives on page ten, and colonization begins on page 49, "thus liquidating in 50 pages at least 2,000 years of history!"

Thanks both to a University publishing program on pre-colonial history and to the import of more enlightened foreign texts, the situation is changing, however. Vacchi feels that the language of the new books is sometimes too difficult for young readers, but does point to at least one book (World History, published in London in 1969) that in addition to being written in "simple language accessible to all" (1973, p. 111) gives roughly equal stress to European and North American history, Asian history, African history and Latin American history. Changes have not been limited to post-primary English-language tests, either. The Lewis team (1971, pp. 4.2-4.3) found adaptive efforts reflected in new primary school books, with the introduction (presumably in Swahili) of information about subjects like local nutrition and simple farming techniques.

A similar trend of gradual quantitative increase and qualitative adaptation seems to characterize the situation with regard to equipment used in schools. Viscusi (1971, p. 26) points out that, already in the late 1960s, schools were "equipped with materials needed for demonstrations" in the field of home economics teaching. More varied and better adapted equipment has, however, been deemed necessary. The second Plan (1969, Vol. I, p. 24) provides that

> Facilities for teaching essential rural crafts and trades . . . with emphasis on the use of local materials and the production of articles of practical value, will . . . be encouraged in schools.

In application of this policy, according to the Lewis team (1971, pp. 6.10-6.11), the Ministry of National Education planned to establish a Technical Equipment Center for the production and dissemination of "simple equipment for use in instruction in secondary schools. . . ." Such equipment was to include both finished products (such as electrical wiring boards) and kits and materials for student manipulation and assembly (e.g., physics experiments, pottery equipment and kits of various kinds). Corresponding to the new, action-oriented pedagogy described in the previous chapter, the materials provided by the Center were to include plans for student construction projects such as village wells and cattle dips. I have been unable to ascertain whether the Center has in fact been created, but it is useful to stress that the educational equipment policy's two distinctive features appear to be the creation and dissemination of equipment: technologically simple and adapted to local settings (as distinct from, say, sophisticated audio-visual aids); and designed to facilitate action by students themselves (as opposed, say, to use by teachers for demonstrations) in the classroom and community.

Policy regarding other educational technology does not seem so clear-cut, if indeed a policy exists in this field. As pointed out in the previous chapter, regular if modest use is made of radio for transmitting lessons to primary and secondary schools (although I have obtained no information on how well broadcast lessons are integrated into actual classroom work, or how widely they are actually received). Tanzania would seem, then, to have opted for the relatively limited use of one of the simpler mass electronic technologies, a choice that contrasts sharply with the option in favor of school television in certain other African countries, whether relatively richer than Tanzania (Ivory Coast) or equally poor (Niger Republic). On the other hand, in at least one project (cf. Schulz, 1973) sophisticated and expensive videotape equipment has been used for educational--in addition to other--purposes.

In the non-formal sphere, considerable thought and effort have gone into the preparation and distribution of sufficient and appropriate written materials of various kinds for diverse levels of student readers. The work of the team responsible for written materials in the experimental literacy project, and later National Campaign, is of particular interest in this regard. Viscusi (1971, p. 15) reports that complacency did not characterize this team, which had instead a spirit of "trial and openly admitted error . . . continual hard work and self-criticism."

An uppermost concern of the Campaign (and other non-formal programs) has been to ensure that enough materials are distributed. According to Viscusi (1971, p. 15) the Government ordered 600,000 copies of primers and associated teaching materials for the 1971 stage of the experimental project, ample to cover the target group. While "the principal limit of the [1971 Time for Rejoicing radio] campaign [was] the number of books that could be distributed" (Hall and Mhaiki, 1972, p. 45), and although there was considerable difficulty in ensuring the timely arrival of printed materials during that campaign, the 1973 health education radio campaign printed and distributed a million copies of two 48 page booklets to all literate group members, in addition to a small manual that was delivered to group leaders. Fully two thirds of the total campiagn budget was spent on printing costs ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 12).

Hall and Mhaiki (1972, pp. 29-30) report ingenious efforts by the Tanzania Library Service to ensure effective distribution to villages of modest but increasing numbers of books, largely intended for new literates, through District Education Officers. New literates are also the intended readership of monthly newspapers published in the sub-areas of the experimental literacy project. According to Viscusi (1971, p. 33) these papers quintupled their printings between February 1969 and February 1971, a still insufficient number since officers assured her that even if printings were more than doubled again "no copy would go unread." She also reported (1971, p. 34) that at least one general circulation newspaper, the Swahili edition of the daily Nationalist, included a page for new literates. In 1970, a national public competition was run to generate books for new literates; 146 manuscripts were thus received.

In terms of form and content, considerable effort has been made to ensure that printed materials in non-formal programs strike a balance between readability and their educational function. The newspapers for new literates capitalize, in Vicsuci's words (1971, p. 33), on the fact that "everybody likes news, especially local news." The language, layout and graphics of literacy primers and other materials have been painstakingly tested and revised to ensure their relevance and comprehensibility. Viscusi reports (1971, p. 16), for example, that the original version of a drawing of a man waist-deep in a hole he was digging had to be redone since, when tested, it was interpreted as a legless spirit on a plate. She further says (1971, p. 34) that, to determine "from new literates themselves what kind of books they like," each new member of a rural library answers a factual and attitudinal survey concerning how far he or she has come to the library, level of education, occupation and preferred kind of reading matter. In addition, "libraries record how often each book in the collection is borrowed and note down any requests for books not in the library."

Presentation and subject matter do more, however, than merely cater to current tastes, since they are decidedly educational in orientation. Muncie (1973, p. 35) notes that

> Most of the [200] titles [of supplementary Swahili reading materials distributed through the Literacy Campaign] are functional in the extreme: simple books on the use of pesticides, on how to treat minor cattle diseases. A few books of poems and fables have [also] been printed, however.

For Viscusi (1971, p. 16) each literacy primer "not only presents basic principles ('plant cotton in ridges') but also places the activity serving as subject matter in a wider perspective than daily work. The subjects chosen for the ten broadcasts and nine chapters of the accompanying manual (Hall and Mhaiki, 1972, p. 40) reflect a similar concern to educate participants about themes not only of physical and temporal immediacy. Subjects include, for example: "Tanzania before written history," "A personal experience during the colonial epoch," "The development of the cooperative movement," "Tanzania and Africa" and "Tanzania and the world."

Equipment used in non-formal programs appears to be extremely simple, although it is unclear whether this is a result of necessity or of policy. Viscusi (1971, p. 26, emphasis added) reports that in addition to home economics demonstration kits, the experimental literacy project had, by 1971, "so far developed only simple aids: a folding portable board [blackboard cum flannelgraph]; posters . . . and flashcards. . . . But it is satisfying . . . that these are constantly used. . . ." Why, one wonders, the "only" and the "but?" Does the regret expressed by them (probably unintentionally) suggest that literacy could be taught better with more complicated, and expensive, paraphernalia? Such, in any event, does not seem to be the operational view of the Literacy Campaign, which in fact instructs teachers to content themselves with such makeshift, and cheap (or costless), aids as a cotton boll, coins and bills, and stones, sticks or leaves for teaching the new math concept of sets--Viscusi (1971, p. 26). A similar approach characterized the Time of Rejoicing radio campaign, whose organizers report with evident pleasure (Hall and Mhaiki, 1972, p. 59) that it was unnecessary to furnish group leaders or members with "chalk, exercise books, pens or pencils"--or indeed any equipment at all.

As far as other educational technologies are concerned, nonformal education has made regular and widespread use of at least two media. Itinerant cinema has been a basic part of cooperative member education and the work of Rural Training Centers. In the latter case, Odia (1971, p. 24) reports that

> Cinema vans attached to the centres disseminate information and motivate communities toward increasing production, and teach local people various simple skills and ways of improving living conditions.

In each of these cases, cinema may be judged to be neither a highly sophisticated technology (such as television) nor a very simple technology. Although fitting within already existing structures (local coops and the RTC network, respectively), cinema does depend essentially on the introduction, transportation, operation and maintenance of external means, requiring in turn relatively complicated energy sources and trained manpower.

The already described successes of various mass radio education campaigns may, on the other hand, be attributed to their mobilization of means that already exist at the village level. Necessary external logistic support (provision of batteries, repairs, etc.) is already available and need not, therefore, be supplied specifically for each campaign. Analyzing the Time of Rejoicing campaign, Hall and Mhaiki (1972, p. 69) observe that

> It is very interesting to note that as far as we know very few study groups could not be formed for lack of a radio receiver. It seems obvious that there are enough receivers in the countryside for us to be able to count on the voluntary help of receiver owners in our future campaigns.

The massive coverage of the 1973 health education campaign bore out this prediction.

To summarize, in formal instruction there is still a lack of printed materials; although some grossly alien texts are still used books with better adapted content are being introduced progressively. The amount of equipment supplied to schools seems to be gradually increasing, and an effort is being made to ensure that such equipment be both appropriate (adapted to local settings and technologically simple) and capable of eliciting direct action by learners. As far as other media are concerned, formal education makes relatively limited use of one of the simpler technologies: radio.

In the non-formal sphere, considerable effort has been made to ensure the distribution of numerically sufficient and qualitatively appropriate written materials. These texts have been disseminated both during and after education programs, and are designed to balance readability and educational function. Whether by policy or necessity, equipment used in non-formal programs has tended to be extremely simple. Finally, although cinema (medium technological sophistication) has been used, the mass medium enjoying greatest favor in the non-formal sphere has been one of the simplest of the educational technologies: radio.

Plant

In what buildings and physical surroundings shall education take place? Formal education's responses to this issue have been varied and, at times, contradictory. In the conceptual phase, and as regards primary and secondary instruction, the Government has opted unequivocally for a non-technocratic approach. Development of school plant, in its policy, is much more than the construction of walls, doors, windows and roofs. The architect of the school-building research program (Nimpuno, 1973, p. 3) has urged that assessment of school buildings needs should take into account such factors as parent and pupil expectation patterns, political consciousness, reintegration into society of school leavers, and the general integration of the school into society.

El Jack (1973, p. 1) reports that, in a study of secondary school facilities, the Government

> . . . expressly emphasized . . . that educational and social aspects will take a central place [and] these aspects should get their due consideration in the economic and technical evaluation to be made.

He further points out (1973, p. 7) that the University departments taking part in the research included Education, Political Science and Sociology.

Consistent with this interdisciplinary approach, and in order to build the material base for the introduction of education for self-reliance, the second Plan (1969, Vol. I, p. 24) provides for "the improvement of school gardens, e.g., by laying on water for fruit and vegetables, poultry keeping, etc." and El Jack reports (1973, pp. 3-4) the planned addition of 20 commercial units, 20 agricultural units and six home economics units to secondary schools.

The design of school plant to ensure the integration of education with surrounding reality--and particularly economic reality--has not always been without problems. Vacchi (1973, p. 108) suggests that one of the main reasons for unfavorable attitudes of students of a school she visited in Kibaha toward field work and related self-reliant activities was

> . . . the distance of the fields from the school which, in addition to obliging the children to walk a long way, separated the two realities physically, and made it necessary to 'go out' of the school both psychologically and materially in order to go to work. . . .

At the time of her visit, the school was, however, attempting to exchange its fields for some nearer to its buildings.

Moreover, there is undeniable ambiguity in the difference of siting of primary schools, on one hand, and secondary schools, on the other. Hatch (1973, p. 71) stresses that remaining "primary boarding schools are being closed down," and that all primary education will take place near learners' homes, so as to ensure integration of education with the community. On the other hand, the Unesco situation report (Tanzania, 1973, p. 5) reports that

> . . . nearly three quarters of all secondary students are boarders, due [in part] to the fact that boarding schools provide facilities for study which are lacking in many Tanzanian homes (examination performance of boarding pupils is considerably better than that of day students).

There is, then, ambivalence at the secondary level. Plant does include practical rooms, fields and the like (i.e., facilities meant to train students in tasks to be used at the village level). Simultaneously, however, villages are thought to lack the educational facilities required to ensure good performance on examinations (which may therefore be presumed to have little relation to village life).

Whatever the early problems of implementation, it seems clear that the Tanzanian policy regarding plant of primary and--to a lesser degree--secondary education has made a definitive break with earlier notions in this area. The "school" is no longer merely a building where pupils receive instruction. It has become a cluster of facilities--building, fields, etc.--in which pupils are both learners and producers, inserted into--rather than alienated from--reality.

This integration of pupils into the active life of the surrounding community through school plant design (among other means) is being taken even further, particularly at the primary level. Lewis (ed.) et al. speak (1971, p. 4.3) of the projected transition from "school" to "human resource development centers and community hubs . . ." and report that the Government was considering the construction, over a ten year period, of 1,760 prototypical models of the new kind of institution in *ujamaa* villages. These multipurpose centers

> . . . will be adaptable for adult group discussion and social functions as well as classroom instruction; and will include day care and kindergarten facilities, a practical room where both children and adults can learn handicrafts, carpentry and domestic crafts, and a community kitchen and dining room. They can thus serve as community schools. . . ."

In conclusion, definite progress seems to be being made, at both the theoretical and the practical levels, in reshaping primary and secondary school plant to forge it into an instrument for implementing the overall policy of education for self-reliance.

The same trend does not appear to characterize post-secondary formal education. Viscusi (1971, p. 9) refers to "the splendid University of Dar es Salaam campus." Although inaugurated in 1970 (i.e., three years after the declaration on education for self-reliance, and a year after the launching of the second Plan, which was designed as a first step in the implementation of the self-reliant policy), the campus is "splendid" in Euro-centric terms only, however. With its broad lawns and meticulously tended flowerbeds, and buildings standing in "splendid" suburban isolation from Tanzanian reality, the campus must be considered a luxurious anachronism.

The same criticism may be addressed to the Dar es Salaam Technical College. Lewis (ed.) et al. report that a November 1970 working party on space utilization at the College determined (quoted on p. B.1) that the then prevalent double occupancy of dormitory rooms "will jeopardize morale and the preparation standard of the [future] technicians." The party accordingly recommended the construction of a new students hostel, which was to ensure single occupancy at a total cost of almost $250,000!

It may be argued, of course, that the introduction of an obligatory annual period of nine off-campus work-study weeks has converted the entire country into a facility of post-secondary education. But the off-campus weeks may also be said to throw even sharper light on the pernicious irrelevance of on-campus facilities. How, one wonders, do students reconcile learning gleaned from their yearly nine-week plunge into impoverished village reality with the message of the other 31 weeks, i.e., that they can only maintain morale and attain a sufficient technical preparation standard if they live in single occupancy rooms and study among flowers and manicured grass on a "splendid" campus?

Two approaches to plant emerge from an examination of the facilities of non-formal programs. One is what could be called the "heavy structure" approach, which appears to assume that education can only take place within four sturdy walls and in "modern" surroundings. This approach seems particularly prevalent in programs that offer courses in residential settings that take learners away from their homes. According to Grabe (1972, p. 54) installations at the Cooperative College in Moshi include

> . . . offices for the staff . . ., dormitories and catering facilities for 150 students at any given time, and library, lecture hall and seminar room facilities. . . . The existing facilities are considered too small [and an addition to bring capacity to 200 students is being considered, to cost $300,000].

Typical of the "heavy structure" attitude is Muncie's judgment that the Ukiriguru Ministry of Agriculture Training Institute's thousand acre farm is (1973, p. 24) "impressive" and Odia's laudatory comment (1971, p. 25) that "the facilities provided [by Rural Training Centers] are of a high standard compared with those in many other African countries." In the event, the "high standard" involves (in the case of the Humbolo RTC visited by Muncie (1973, p. 28): "three dormitories [for a total of 40 residents], a kitchen, a mess hall, a recreation and library hall, workshops, housing for staff and a vegetable and animal farm . . ."--all requiring a capital investment of about $100,000. The possible dysfunctionality of such an approach in the Tanzanian context--i.e., in terms of applicability of learning acquired to village settings--is symbolized by the fact that Muncie found that "in one machinery shed stands a lone and unusable tractor; for four months the Center has been waiting for delivery of a spare part which would make it operable again."

The alternative, or "light structure," approach to non-formal plant emerges from the second Plan's assessment (1969, Vol. I, p. 157) that it would be "impossible to devote capital funds to the building of new centres for adult education during the Plan period and consequently full use must be made of existing premises." This approach is found chiefly where learning takes place at or near learners' homes. Thus, Grabe reports (1972, p. 14) that the sessions of the rank and file co-operative education campaign in 1970 took place in "villages or in the neighboring market place," while a typical cooperative correspondence course study group (1972, p. 32) might meet "in the small, dark office of a society or in the shadow of a tree on a farm. . . ." Similarly, Viscusi (1971, p. 8) reports that literacy classes met in shelters built by themselves or "seated on a [school] classroom floor [or] under a roof without walls while children wandered in and out and lowing, grunting cattle grazed nearby." Unlike the "impressive" thousand acre training institute farm visited by Muncie, Literacy Campaign classes have small shambas that Viscusi (1971, p. 7) found "wedged in between individually owned plots [or] near primary schools alongside the school plot."

Typical of the versatility and flexibility of the "light structure" approach were the different kinds of facilities used by study groups in the Time of Rejoicing radio education campaign. Hall and Mhaiki report (1972, p. 59) that while some 20% of groups met in such diverse locales as community centers, ujamaa village centers, cooperative buildings and TANU offices, and although 40% used primary schools, fully another 40% simply met out of doors. The framers of the second Plan (1969, Vol. I, p. 157) appear to have been correct when they predicted that "Fortunately, this necessity [to use existing premises, including those out of doors] is unlikely to impede development" of non-formal education.

To sum up, the Government has adopted an unequivocally anti-technocratic policy on school plant, an interdisciplinary policy aimed at integrating school and society in implementation of the policy of education for self-reliance. At the primary and secondary levels, and despite certain initial problems and continuing ambivalence at the secondary level, the policy seems to be being successfully implemented, and opens the perspective of the replacement of the school per se with what one group of authors calls multipurpose human resource development centers. In contrast, more than three quarters of most post-secondary students' education time takes place in luxurious and anachronistic isolation from Tanzanian reality, but with obvious links to the 'modern' and urban-oriented development model.

Two trends characterize the non-formal sphere's responses to plant issues. Expressed principally in residential facilities, a heavy structure approach assumes that proper education can only (or best) take place in relatively elaborate installations, whose impact may not be entirely functional in terms of applicability of learning acquired in village settings. The light structure approach appears most readily in non-residential courses, and seeks to answer the demand for education, despite lack of capital investment, by use of various existing locales--including the out of doors.

Conclusions

The first conclusion emerging from this chapter is that, as in fields already treated, there are clear dissimilarities and similarities in the respective responses of formal and non-formal education to issues of non-financial resources. Formal instruction is characterized by: maintenance of credentialled professionalism; high and stable pupil: teacher ratios (at the primary level) and possible teacher overload and stress (resulting from the conflicting kinds as well as the great amount of tasks); shortage of administrators; lack of appropriate texts; and global conceptualization of school plant. In contrast, non-formal programs feature: functional leader recruitment criteria; acceptably low learner:leader ratios; sufficient administrators; sufficient appropriate texts, and the absence of an overall strategy regarding plant.

Despite these differences, there is convergence of policy and/or practice as follows. Both formal and non-formal education have tended since 1967 to share the following characteristics: massive recruitment and training (or upgrading) of instructional staff; decentralization of training or retraining (particularly of primary teachers and non-professional leaders of non-formal programs); practical training orientation (method and/or content); acceptable learner:instructor ratios (at post-primary levels in the formal sphere); ambivalent teacher status that functions as a bridge between the socio-economic status and/or general or professional attitudes or aspirations of the "modern" urban-oriented sector of society, on one hand, and the non-"modern" rural-based sector, on the other; simplicity and adaptation of equipment; use of a pre-existing relatively unsophisticated technology (radio); and two contradictory trends regarding plant (an actually or potentially isolated and isolating heavy structure--residential and relatively elaborate--vs. an integrated and simple light structure).

In addition to these general convergences, it appears that there is, in regard to non-financial resources, a particularly close resemblance between primary schooling and many (though not all) non-formal programs. Both types feature massive and decentralized teacher or leader training, special vulnerability to ambivalence of teacher or leader status, and a light-structure approach to plant (stressing integration and relevance).

It is perhaps useful to reformulate the above considerations in light of the development/education vicious circle described at the beginning of this chapter. Which aspects of the practice of education for self-reliance in the formal and non-formal spheres seem most conducive to accelerating or braking an escape from this vicious circle consistent with self-reliant tenets? The following table suggests some answers.

Reformulating the above conclusions, it seems plausible to suggest that, globally, both formal and non-formal education display certain factors likely to accelerate, and other factors liable to brake, an escape from non-financial resource constraints consistent with the policy

TABLE II

ACCELERATORS AND BRAKES IN RESOURCES

RESOURCES	ACCELERATORS	BRAKES
Human	Massive and decentralized training/upgrading (primary, secondary, non-formal)	
	Pragmatic recruitment criteria (based on skills possessed and function to be performed) drawing on non-professionals (non-formal)	Credentialled professionalism (little or no use of peer or non-professional resources) (formal)
	Instructors as agents of self-reliant change (commitment of primary teachers; socio-economic status and general attitudes of non-formal leaders)	Instructors as guardians of--or aspirants to--"modern" urban-oriented stability (professional aspirations of some non-formal leaders; socio-economic status and educational achievement of formal cadre, and its ambivalent attitudes)
	Adequate and flexible administrative staff (non-formal)	Shortage and status ambivalence of administrative staff (formal)
Material	Texts	Texts
	(The need to adapt texts--formal and non-formal--is a brake, but it is also consistent with self-reliance, and therefore simultaneously an accelerator.)	
	Simple equipment (formal and non-formal)	
	Use of pre-existing and relatively unsophisticated technology: radio (formal and particularly non-formal)	

TABLE II (cont.)

RESOURCES	ACCELERATORS	BRAKES
Plant	Simplicity and integration with reality (primary; non-residential--i.e., most--non-formal programs)	Relatively elaborate and isolated (residential non-formal; secondary, and particularly post-secondary formal)

of education for self-reliance. Within this general conclusion it may, however, be affirmed that, as regards overcoming non-financial resource obstacles: (a) accelerators are more prevalent in non-formal programs (massive decentralized training, pragmatic recruitment of non-professionals, instructors as agents of change, adequate administrative staff, simple equipment, (massive) use of radio, predominantly light-structure plant) than in the formal sphere (massive training (decentralized at primary level), instructors as agents of change, simple equipment, (limited) use of radio, (primary level) light structure plant); conversely (b) brakes are more characteristic of formal education (credentialled professionalism, instructors often guardians of "modern" stability, shortage and status ambivalence of administrative staff, heavy structure (post-primary) plant) than of non-formal education (some staff aspire to "modernity," heavy-structure plant among residential programs); with the exception that (c) primary schooling is less subject to brakes when it resembles a non-formal more than formal approach (massive decentralized instructor training, change-oriented commitment of primary teachers and socio-economic status and general attitudes of non-formal leaders, light-structure plant).

CHAPTER VI

FINANCING OF EDUCATION

The preceding chapter examined the kinds and amounts of different items on the shelves and in the stock-rooms of the Tanzanian educational exporium. Here, the purpose is to study price tags and ledgers.

It is difficult to arrive at a complete and coherent image of the development of Tanzania's education revolution in this sphere, not because the authorities attempt to hide the figures from an external auditor's prying eyes, but because they themselves do not seem to have full data. Also, it seems that policy and/or practice in this field are particularly susceptible to perplexing fluctuations. Conclusions here can, therefore, only be very tentative.

Keeping these difficulties in mind, the two major questions seem to be: What are the highlights and trends of national expenditure on education? Of national sources of educational financing?

National Expenditure on Education

By turns, what are overall educational expenditure, capital expenditure, recurrent expenditure, and expenditure per learner?[1]

In global terms, education accounts for a large percentage of public expenditure, although evidence regarding overall expenditure trends suggests growth has been far from constant. The Unesco situation paper (Tanzania, 1973, p. 9) points out that while total government expenditure grew by 16.5% p.a. between 1964/65 and 1970/71, outlay on education rose by only 14.5% p.a.--an affirmation substantiated by a Ministry of Education performance rate during the first Five-Year Plan reported (in the second Plan, 1969, Vol. I, p. 19) to have been 51.6% compared with an all-ministries average of 82.6%.

---

[1] Conversion rates used are: one shilling = $.14, or one dollar = 7.1 shillings.

The second Plan determined, however, that education should not only keep rate with the increase in overall expenditure, but should in fact become a leading sector compared with revenue availability. It explains that (1969, Vol. I, p. 148):

> The availability of resources to government will grow at . . . between 7 and 8 per cent per annum [during the second Plan period: 1969-1974]. However, in order to achieve full primary enrolment at the earliest possible date (1989) a growth rate of 9 per cent was allowed for education. This will increase education's share of the national expenditure substantially.

Actual performance in terms of percentage of increase in education's share of monetary GDP derived from figures reported in the Unesco situation paper (Tanzania, 1973, Table IV) averaged 9.5% between 1968/69 and 1970/71, but was uneven (14% from 1968/69 to 1969/70, but only 5% between 1969/70 and 1970/71). Also uneven were the projected increases between 1970 and 1971 (3%) and 1971 and 1972 (11%).

The jagged nature of progress may reflect perfectly logical internal considerations on which information is not available (e.g., intensive plant-building one year but not the next). Of equal importance with the rate of the education budget's overall increase is its sectoral allocation. The second Plan, as quoted above, is explicit: the overarching objective was "to achieve full primary enrolment at the earliest possible date. . . ." At the time of the drafting of the second *Plan*, then, the chief explicit concern with regard to educational expenditure appears to have been for formal schooling. This reflects an earlier trend, very clearly expressed in Knight's 1966 monograph, which relates *The Costing and Financing of Educational Development in Tanzania* to formal education exclusively, with the exception of one and one-half pages devoted to a debate on formal versus on-the-job vocational training (1966, pp. 53-54).

Given the growth of programs outside the formal sphere, it seems odd in retrospect that more financial attention was not officially paid to them. Almost two years after the second *Plan* was launched, Odia (1971, p. 28) deemed that:

> The importance attached to training and non-formal education . . . is not at all matched by the budgeted expenditure in those fields compared with that for formal education. The time may be opportune for a shift of emphasis from formal education to non-formal education and training.

In fact, that shift was already beginning. Hall and Mhaiki (1972, p. 20) state that the first national budget specifically earmarked for adult education was adopted in 1969. Simultaneously, actual government expenditure on literacy began to skyrocket, more than quadrupling between 1969/70 and 1971/72 (*Adult Education and National Development in Tanzania*, 1974, p. 21), with estimated outlay planned nearly to double again between 1971/72 and 1973/74).

The Lewis team (1971, p. 3.1) compare overall growth rates in expenditure during the 1969-73 period: formal education averaged an annual increase of eight per cent, while the figure for non-formal programs was an astronomical 54%. Understandably, they noted a "marked shift away from expenditures on formal education [toward] all other types of education and training, including non-formal education. . . ." The latter's share of total public expenditure on education was to rise from seven and one-half per cent in 1969 to 19.4% in 1973.

In conclusion, the Lewis group wondered how long non-formal education could continue to mushroom without compromising other educational priorities. They predicted (1971, p. 3.2) that

> The apparent shift towards non-formal education over the period 70/71-72/73 is unlikely to be sustained during the rest of the decade if the Government is intent on carrying out its ambitious plans for quantitative expansion and qualitative improvement of primary education.

Indeed, they projected a necessary 11.8% annual growth rate in expenditure on primary education over the 1971/72-1978/79 period if the aims regarding this level of instruction were to be achieved, which would require a negative growth rate of -3.7% for non-formal education. Their advice was to slow the primary growth rate and maintain a modest but positive six per cent annual rate of expansion in the non-formal sphere.

In sum, while global public expenditure on education rose at an uneven rate in the first years of the second Plan, and although major stress was laid on expansion and change of primary education, the most remarkable feature of the financial situation in this period was the official recognition and impetus given to non-formal education which, by 1973, was taking nearly one fifth of Tanzanian government expenditure on education. So swift and great was this rise that some observers wondered if it could be sustained without compromising other government education aims--particularly as regards primary education.

Examination of official figures regarding actual expenditure (1969/

72), approved estimates (1972/73) and estimates (1973/74) sheds light on trends regarding capital expenditure within and between formal and non-formal spheres. Total growth of annual capital expenditure by (or directly related to) the Ministry of National Education between 1969 and 1974, as government figures indicated in a Unesco report on Preliminary Education Projects for the Third Plan (1974, Annex 35), was 143%. Primary education was to receive considerably less (53%) than the overall average increase, but this was possibly due to the expectation of local participation in school construction. All forms of secondary education (general, technical and commercial) were to receive a 592% increase in the 1973/74 allocation compared with the 1969/70 figure, perhaps largely accounted for by building of practical rooms in line with the implementation of the policy of education for self-reliance. Higher education (an increase of 459%) was not far behind, its increase likely to be due to a building policy already analyzed as being antithetical to education for self-reliance.

Far and away the greatest growth was to be registered in the field of adult education, in which annual capital investment actually increased sixfold between 1969/70 and 1970/71 and was to increase a total of 923% the whole period, i.e., over six times more than the Ministry and Ministry-related rate.

Outside expenditure by or directly related to the Ministry of National Education, there were also notable increases in public financing of educational programs, most of which were of a non-formal character. As in the formal sphere, actual and projected rates of spending increase for the second Plan were uneven, sometimes extremely so. The Ministry of Health spent 1.9 million shillings on educational activities in 1969/70, and 5.1 million in 1970/71, but dropped back to a mere 0.6 million in 1971/72. Its approved estimates for 1972/73 rose again, to 2.1 million shillings, and the estimations for 1973/74 projected a fantastic eleven-fold jump to 23.3 million. The combined figures for capital educational expenditure by the Ministry of Agriculture, Ministry of Regional Administration and Rural Development, Second Vice-President's Office and the Ministry of Natural Resources and Tourism display a similar pattern of fluctuating growth.

On the other hand, capital spending for education purposes by the Central Establishments grew and was expected to continue growing at a more regular, albeit very ambitious rate. It more than doubled between 1969/70 and 1970/71 and almost doubled again from 1970/71 to 1971/72, with an additional 50% increment estimated for the period from 1971/72 to 1973/74. The Ministry of Labor and Social Welfare evidenced a similar curve of spending increase.

The difference between these two patterns of capital expenditure on non-formal education outside the budget for activities by and related to the Ministry of National Education correlates with already suggested differences in the function of education offered. In the first instance, programs of the Ministry of Agriculture (Ministry of Agriculture Training Institutes, extension services and cooperative education), and the Ministry of Regional Administration and Rural Development (responsible for the Rural Training Centers), tend to focus on the training of the new rural, non-"modern" leadership, which has already been pointed to as a vital force in the achievement of self-reliant socialism. Actual and estimated capital investment in such programs has grown considerably over the second Plan period, but in a sometimes extremely erratic manner.

On the other hand are the programs of the Central Establishments (Institute of Development Management, Civil Service Training Center, and Tabora Secretarial College) and of the Ministry of Labor and Social Welfare (the National Industrial Apprenticeship Scheme and National Training Program). These programs tend to feed the "modern," urban-oriented sector of economic activity and stratum of society where--it has been suggested earlier--values, aspirations and behavior may be far from fully consistent with the precepts of self-reliant socialism. The real and projected growth of capital expenditure for such programs has been large and regular.

This difference leads one to wonder if capital investment in the second kind of program has not continued to follow pre-1967 patterns. blithely ignoring the innovative implications of the policy of education for self-reliance for the kinds of investment. As a corollary, might not the fluctuations of capital spending in the first kind of program (more compatible with self-reliant socialism than the second) reflect a search for better suited kinds of investment? Available evidence does not lend strong support to this hypothesis.

Indeed, at least one of the urban-oriented, "modern" programs has displayed considerable flexibility regarding capital goods. The Lewis group (1971, p. 6.13) noted that the National Industrial Training Program--an eminently "modern"-oriented effort--makes use of National Service facilities and that "the cost of housing trainees is thus avoided," while the Program's evening trade courses take place in primary schools, workshops and other already-existing locales. Conversely, certain of the programs most closely identified with the emergence of the new non-"modern" rural leadership seem not to have paid heed to the implications of self-reliance for capital investment. Muncie (1973, p. 28) reports that an average Rural Training Center with housing for 80 students at a given time costs $200,000 to build (compared with the $35,000 average unit construction cost of primary schools reported for 1971 by Lewis (ed.) et al., 1971, p. 4.4). Less than a systematic search for kinds of investment more consistent with the policy of education for self-reliance, such programs' erratic pattern of capital spending seems to reflect a degree of confusion.

Clarity of purpose--rather than confusion--characterizes an important new effort to achieve capital savings, in a manner compatible with the precepts of education for self-reliance, through the construction of multi-purpose Community Education Centers. The Lewis group reported (1971, p. 4.3) that:

> To ensure that primary schools will become human resource development centers and community hubs, the government is considering the construction of a [Community Education Center in an *ujamaa* village] in each of the country's 1,760 wards over a ten-year period. These model schools . . . will be adaptable for adult group discussion and social functions as well as classroom instruction; and will include day care and kindergarten facilities, a practical room where both children and adults can learn handicrafts, carpentry and domestic crafts, and a community kitchen and dining room.

The Lewis group expected that thanks to this program, with which the Government now seems to be proceeding, "economies will be reaped in the use of school buildings. . . ." According to official figures quoted in *Preliminary Education Projects for the Third Plan* (1974, Annex 14), the average unit construction cost per Community Education Center is calculated to be about $52,500. Taking into account the wide variety of uses to be made of the Centers for both formal and non-formal education (as well as many other activities), this figure probably compares favorably with the just-mentioned capital cost of $35,000 for primary schools. Insofar as it integrates education and other community activities while offering learners the opportunity for immediate practical and productive application of what is learned (e.g., in the workshop and cooperative center with which each Community Education Center is to be equipped), this formula also is a direct expression of the policy of education for self-reliance.

To summarize, between 1969/70 and 1973/74 capital expenditure by or related to the Ministry of National Education in adult education was to grow over six times more than the average Ministry-wide increment, and over one and one-half times as much as its nearest competitor in the formal sphere, secondary education. Other ministries also registered considerable growth in investment in non-formal education and training. Spending on programs identified with "modern" urban-oriented development seems generally to have grown regularly in pre-1967 patterns (ignoring the innovative implications of the policy of education for self-reliance). Investment in schemes compatible with the emergence of a new, rural, non-"modern" leadership grew and were expected to grow in very erratic fashions and in ways not particularly consistent with the implications of education for self-reliance for capital expenditure. In contrast, the idea of building multipurpose Community Education Centers did reflect the self-reliance policy in a way likely to reap capital savings.

With regard to recurrent expenditure, and returning to the official figures quoted in Preliminary Education Projects for the Third Plan (1974, Annex 33) on actual annual expenditure (1969/72), approved estimates (1972/73) and estimates (1973/74), there was to be an overall five-year growth in spending by or related to the Ministry of National Education of 70%. Although remaining far and away the largest single item in the budget, expenditure on primary education only grew by 58%, which in turn led the increase under the secondary education heading of only 29%. Among other types of formal instruction, higher education spending grew by 112%, well above the Ministry-wide average, but almost forty times less than the astronomical 4,300% projected growth for adult education.

Since actual expenditure on adult education increased fifteen-fold between 1969/70 and 1971/72, and taking into account a further near doubling of the actual 1971/72 figure by the approved estimate for 1972/73,[2] this phenomenal target may well have been reached. If it was, adult education now receives more, in absolute terms, than the lowest major expenditure item in the sphere of formal education (teacher training), although continuing to absorb less than half the amount devoted to secondary education or higher education and only about one sixth of the figure spent on primary schooling.

Other ministries' budgets for education (mostly non-formal in nature) were also expected to show considerable--albeit not so extraordinary--growth, more than doubling by the end of the period. A one-fifth increase in actual spending was achieved between 1969/70 and 1971/72, and further growth of nearly one third was planned between actual spending for 1971/72 and approved estimates for 1972/73. Unlike the situation with regard to trends in capital spending, growth curves were relatively stable for all ministries and other responsible institutions. Thus Ministry of Health recurrent expenditure on education grew from 1.9 million shillings in 1969/70 to 3.3 million the following year and 4.8 million in 1971/72, with an approved estimate for 1972-73 of 5.2 million and a 9.9 million estimate for 1973/74. Ministry of Agriculture budgeting was somewhat more uneven, but not nearly so erratic as in capital investment. Its actual and estimated spending for the five years referred to here was: 20.3 million shillings, 31.1, 29.8, 29.0 and 39.0 million.

---

[2] Hall (Adult Education . . ., 1974, p. 201) reports an effective tripling of the Government's budget for adult education between 1970/71 and 1971/72, presumably referring to Ministry of Education recurrent expenditure.

It is helpful to examine an important item of recurrent expenditure: remuneration of school teachers and leaders of non-formal education. According to Vacchi (1973, pp. 98-99) teacher salaries ranged from a minimum of about $500 per annum for grade C staff to a maximum of some $1,670 per annum for grade A personnel. Assuming a working week of 50 hours (to take preparation time and non-formal instructional activities into account), and further assuming a working year of some 36 weeks, one may derive respective costs per hour. The figures are 28¢ per hour for the minimum grade C wage and 92¢ per hour for the maximum grade A salary, or an average hourly expenditure for instructional staff of 60¢. These are, naturally, very rough figures since they do not take a number of additional costs into account, e.g., training and retraining costs, and fringe benefits. Nevertheless, they may be compared with hourly salary figures derived in similar fashion for various kinds of non-formal educational leadership.

In the most favorable instances, there is no direct outlay for non-formal leaders. Hatch (1973, p. 74) speaks of volunteer rural adult education course leaders who work "often for no remuneration other than the pride of seeing their fellow community members gain a particular skill." Such has been the case of intensive short-term efforts like the radio education campaigns. Reliance on voluntarism does not, of course, mean that leaders are cost-free since (a) they require expenditure for training, and (b) their participation may sometimes constitute an internal transfer of human resources--they teach instead of undertaking some other useful activity--with a corresponding opportunity cost. Nevertheless, such short-term campaigns do not feature direct salary outlays for instructors' salaries, and thus achieve considerable savings on recurrent expenditure.

It would probably be unrealistic to expect large numbers of unsalaried instructors to work for long periods. In practice, longer-term non-formal programs do pay their instructors, albeit at varying rates. At the top of the scale probably come the staffs of such bodies as the Ministry of Agriculture Training Institutes and the Rural Training Centers who, since they seem generally to be civil servants, presumably receive remuneration on a par with, say, that of school teachers.

In other instances, and particularly the case of mass non-residential programs at the village level, salary costs appear to be rather lower. Viscusi (1971, p. 23) reports that literacy instructors, who are asked to teach a minimum of two years, "receive an honorarium of thirty shillings (about $4.20) a month for teaching one class six hours a week." Allowing for an extra paid hour per week for preparation, one may derive from these figures an hourly wage of 15¢. Odia (1971, p. 21) notes a standard hourly fee for other kinds of village adult education leadership of two shillings, i.e., 28¢.

On the whole, recurrent expenditure on formal education was to grow fairly rapidly during the 1969-1974 period, with an average 70% increase for spending by or related to the Ministry of National Education. In contrast, Ministry and Ministry-related outlay on non-formal education was to increase by perhaps as much as a phenomenal 4,300%, and other ministries' spending on (generally non-formal) education was projected to double. Actual performance rates for the first three years of the plan suggested that these targets were likely to be met through steadily increasing budget growth. Concerning a significant item of recurrent expenditure, instructors' salaries, direct outlay per hour for schoolteachers ranged from 28¢ to 92¢, with an average of 60¢. Similar costs seem to have been incurred for non-formal educational leadership in some instances, e.g., when schoolteachers themselves ensured non-formal leadership, and in the case of such programs as MATIs and RTCs. Costs were probably considerably lower for long-term mass village-level campaigns, ranging from 15¢ to 28¢ per hour for literacy and adult education courses, respectively. In the case of short-term mass programs like the radio education campaigns, there was no direct salary outlay since leaders were volunteers.

An attempt is now made to determine and compare costs per learner in different types of formal and non-formal education. Regarding the following analysis, several cautionary points warrant stressing: unless otherwise stated, figures are for national spending per enrolee hour of instruction. They do not, therefore, represent total spending (in some cases--e.g., the University--foreign investment is high) nor do they approximate unit spending per amount of learning actually acquired (since drop-outs among enrolees are not taken into account). Calculations are, finally, based on certain assumptions, made explicit here, which are doubtless not fully adequate approximations of a reality about which fuller information is not available. To obtain even roughly comparable data, it has been necessary to attempt to formulate spending in terms of cost per hour of instruction received.

Regarding formal education, calculations are based exclusively on official figures reproduced in Preliminary Education Projects for the Third Plan (1974, pp. vi-vii, Annexes 33, 35). From these figures a per capita recurrent expenditure in the approved 1972/73 estimate for primary school enrolees of $22.82 is derived, the relevant capital expenditure sum being $1.53; total per capita primary enrolee spending was, thus, to be $24.35. Assuming 36 20-hour weeks (primary schools work generally on half-day shifts), the per hour cost of primary instruction per pupil works out to about 0.03¢.

At the secondary level, per capita recurrent expenditure was to be $155.82, capital expenditure $95.90, and total spending per enrolee $251.72. Assuming 36 30-hour weeks, the per hour and per student cost of secondary instruction totals 23.3¢. In this connection, the Unesco situation report (Tanzania, 1973, p. 9) points out that "unit costs are particularly high in the secondary level of education, partly because of the large proportion of boarding schools and partly because of a low pupil/teacher ratio. . . ."

With regard to university education, the figures were $3,250 per student recurrent expenditure according to the 1972-73 approved estimate and $680 capital investment per capita, making a total annual per student outlay of $3,930. Assuming 30 hours of instruction per week, and 31 weeks of academic instruction (i.e., not including the nine off-campus weeks a year, a calculation that may skew the figure somewhat upwards), the per hour cost of educating a university student is on the order of $4.22.

Turning to the non-formal sphere, and taking various programs in descending order of costliness, the most expensive non-formal education seems to be dispensed by the Cooperative College at Moshi. Grabe (1972, pp. 54, 56) indicates figures from which one may derive an annual recurrent expenditure per enrolee of $1,126 for the year 1969/70. (It should be stressed that this figure does not include the cost of foreign staff at the College, i.e., five of a total staff of 13.) Assuming an instructional year of 40 weeks, i.e., equivalent to the total university year, and a week of 30 instructional hours, one arrives at an hourly per enrolee cost of 93.8¢.

The Lewis group (1971, p. 5.3) report a recurrent per student cost at Rural Training Centers of $350, which they felt was sufficiently high (because of boarding costs) to "clearly limit the rate of expansion of RTC's." Assuming, again, 40 weeks per year of 30 hours of instruction, the cost per enrolee hour was on the order of 29¢.

The Unesco study on Non-Formal Education and Training in Africa (1973, p. 7) notes a $108 average annual unit recurrent cost for students at the YMCA Farm School. A calculation of 36 weeks of 30 hours of instruction (equivalent to the secondary school schedule) yields an hourly cost per enrolee of 10¢.

According to figures provided by Grabe (1972, p. 56), the Cooperative Education Center had a recurrent annual budget of $169,000 in 1970, of which roughly one third was spent on activities of the seven cooperative education wings throughout the country, with the remaining two-thirds being used for the Center's own activities (i.e., about $112,700). These activities were extremely varied, and included one day activities for some 25,000 coop members (1972, p. 14), and film showings to 100,000 spectators (1972, pp. 60-61), as well as correspondence courses for 1,338 study groups of between ten and fifteen members each (1972, pp. 30, 32), or a total--assuming an average group membership of 12--of 16,056 enrolees. Assuming that as much as half of the Center's budget for its own activities was spent on correspondence education, one derives an annual expenditure per enrolee of $3.53. Further assuming an average instructional year of 36 weeks (equivalent to the school--rather than university--year) of one hour of study, possibly a low average but one which allows for the fact that study groups are self-motivating and not convened by external leaders, the figure per hour of learning is 9.8¢.

According to the Unesco document on *Non-Formal Education and Training in Africa* (1973, p. 12) the six-month agriculture courses given in the framework of the German-supported Lushoto Integrated Development Project cost $45 per pupil, presumably recurrent spending and including the foreign contribution. Assuming, then, 24 30-hour weeks of instruction, an hourly per-enrolee instructional cost of 7.5¢ is derived.

Next among non-formal programs are the radio education campaigns.

Hall and Mnaiki (1972, pp. 40, 42, 66) indicate a per enrolee expense of 28.4¢ for the 1971 Time of Rejoicing campaign, pointing out however that this outlay does not take into account certain salaries, including for example about 40 man/months provided by the Institute of Adult Education. That campaign was composed of ten half-hour broadcasts followed by a certain amount of discussion time. Assuming the latter averaged a further half hour, and thus that the total learning time was ten hours, the hourly cost per enrolee works out to 2.8¢.

"Large Scale Multi-Media Education Campaign in Tanzania" (1973, p. 13) points out that the 1973 radio health education program reduced costs since "most services were provided either by government officers and [*sic*] volunteers. . . ." Expenditure per participant was, thus, reported to be around 20¢. Assuming 12 hours of instruction (this campaign lasted 12 instead of ten weeks), the cost per enrolee hour was on the order of 1.7¢. Thus the average cost per enrolee hour for both campaigns was 2.3¢.

The Government document on *Adult Education and National Development in Tanzania* (1974, pp. 27-28) offers overall annual literacy enrolment and recurrent expenditure figures for the period 1972-1975, including foreign aid, from which a yearly per enrolee average of $4.35 emerges. Viscusi (1971, p. 23) reports six hours of classes per week. If there are 36 instructional weeks in the year, the cost per hour and per enrolee is two cents.

Gross official figures for Ministry of National Education spending on adult education and enrolment in 1973-74 (most programs taking place at the village level under the supervision of instructors) yield an estimated per pupil estimated recurrent expenditure of $1.22 and 12¢ capital investment, or a total of $1.34. (It should be noted that these figures--like those for literacy--most probably do not account for salaries and other expenses pertaining to the primary school teachers who, we have already seen, make up a significant part of the adult education instructional cadre.) Assuming an average participation in adult education courses of two hours per week, and a year of 36 weeks, one may derive an hourly cost of 1.9¢.

To recapitulate with regard to hourly costs per enrolee in different kinds of education, and keeping in mind the cautionary remarks made above (as well as the fact that while costs reported for formal education include capital and recurrent expenditure, those indicated for non-formal programs sometimes probably only refer to recurrent spending, or indeed only part thereof), the following table of orders of magnitude may be useful.

Two points arising from this comparison may be made in conclusion. In the first place, it is probably not overly arbitrary to suggest that different kinds of education in Tanzania divide themselves into three groups of costliness, blurring the difference between formal and non-formal education but in correlation with learners' socio-economic role and status in society.

In the most expensive group, about four and one half times more expensive than its nearest competitor reported on here, is the university, which trains the urban, "modern"-oriented elite. (No non-formal program even approaches the costliness of the University.) In second place come institutions whose function is to train middle level manpower, whether

TABLE III

COMPARATIVE COSTS PER HOUR OF INSTRUCTION

ORDER*	FORMAL EDUCATION	NON-FORMAL PROGRAMS
1.	University ($4.22)	
2.		Cooperative College (93.8¢)
3.		Rural Training Centers (29¢)
4.	Secondary Education (23.3¢)	
5.		YMCA Farm School (10¢)
6.		Cooperative Correspondence Education ([illegible]¢)
7.		Lushoto Agricultural Courses (7.5¢)
8.		Radio Education (2.3¢)
9.		Literacy Courses (2¢)
10.		Adult Education (1.9¢)
11.	Primary Education (0.03¢)	

*Order progresses from most to least costly per enrolee hour.

for the urban-oriented, "modern" sector of society (cf. the already analyzed ambiguity of the perceived role of secondary education) or for the new, rural non-"modern" leadership (the Cooperative College and RTC's). These institutions cost considerably less than university training, but are between three and f[illegible]y times more expensive than the third and last group (primary school, the YMCA Farm School, cooperative correspondence education, radio education, literacy, etc.). This last group's main function is to offer basic education or up-grading to the common citizen, most likely to be--and remain--a member of the rural majority.

The second point is that this comparative treatment of per capita learner costs appears to turn into mythology the assumption still widespread among many educational reformers that non-formal education is somehow cheaper than formal instruction. As early as ten years ago, Skorov (1966, p. 51) examined various training programs such as the Civil Service Training Center, Ministry of Health Training Institute and similar schemes of other ministries, and determined that "the main shortcoming of this type of [out-of-school] training is its relatively high unit cost . . . due to the small number of those attending. . . ."

The figures just examined indicate that even mass basic non-formal education designed in general conformity with the principles of education for self-reliance (e.g., the literacy campaign, radio education campaigns and adult education courses) are not spectacularly cheaper than primary schooling.[3] Indeed, they probably are dearer since these figures have not taken into account certain capital expenses for non-formal programs, and because such programs tend often to draw on staff and infrastructure whose cost is accounted for in formal education budgets. Non-formal schemes training middle level manpower (e.g., the Cooperative College and RTC's) do appear to be dearer than their formal counterparts (secondary schools).

---

[3] B. Hall (conversation with the author, August 1975) suggests rather lower figures than those just advanced. He reckons the respective per hour costs of the health-oriented radio campaign, regular adult education and the Unesco-UNDP experimental literacy project as follows: .04¢, .26¢ and .62¢. Even so, they are dearer than the 0.03¢ hourly cost derived for primary schooling.

National Sources of Educational Financing

What are the chief government sources of educational financing, traditional non-governmental sources, and new sources related to the policy of education for self-reliance?

According to the Unesco situation report (*Tanzania*, 1973, p. 9) "virtually all [expenditure on education in 1970/71] was financed by public resources." There seems, however, to be some lack of clarity among planners as to the economic meaning of education, and particularly formal education. Thus the second *Plan* (1969, Vol. I, p. 148) refers to education as "by far the largest social service," a view reflecting the assumption that schooling is a consumption item in national budgeting. On the other hand, the *Plan* (1969, Vol. I, p. 37, emphasis added) simultaneously refers to "the *investment* programmes in [fields including] the higher education system." Yet even here, the investment is viewed as having only a long-term return, and it is stated that "Government funds will gradually be channeled towards projects which have more direct possibilities of immediate output increase" than education.

The Government is also the chief source of funds for tpe non-formal field. But here, more diversity is apparent. Thus Grabe (1972, p. 56) states that the Cooperative College received for 1969/70 a direct Government subsidy covering only 25% of its budget, not including certain ad hoc course fees paid by various Government agencies for their staff attending the College. Furthermore, non-formal education is viewed by at least some observers as more immediately productive than the Government seems to consider schooling. Odia (1971, p. 23) ventures to affirm that:

> Considering the heavy losses incurred in several African coop movements [in other countries] due to mistakes, ignorance and wrong attitudes, expenditure on [cooperative] member education may well be the most productive short-term investment that can be made in Tanzania.

In summary, formal education is financed overwhelmingly by public funds, although there was no clear interpretation of the economic meaning of education (investment or consumption) at the time the second Plan was prepared. Government also is the chief source of financing for non-formal education, which, however, does draw on a variety of sources. Non-formal education may, furthermore, be viewed as more immediately productive in economic terms than schooling.

Non-governmental sources of income traditionally associated with education in the colonial period have survived through the Western period of Tanzanian education into the era of self-reliance. In some instances there has been a vacillation--if not a clear decline--in the importance of such sources' contribution. The role of school fees is a case in point. Referring to research carried out in 1965-67, Varkevisser states that (1973, pp. 269-270):

> Teachers are remorseless about sending children away who arrive [on the first day of school] without the 10 to 50 shillings in fees demanded by the government. . . . Any delay in payment risks that someone else may take a child's place.

Sochor (1970, p. 12) noted that annual fees of 15 to 50 shillings were still required from primary pupils in the Mwanza area in 1970. The Unesco situation report (*Tanzania*, 1973, p. 3) indicates that fees varying from region to region and according to grade, and ranging from 10 to 60 shillings a year, were still required. The impact on rural families is readily imagined if one takes into account that per capita annual GNP noted by the Unesco report (1973, p. 2) was $33.50; thus a single child in the highest grade of primary school would cost 60 shillings, or $8.40--i.e., ten per cent of average income.

The costliness has, however, been reduced in many cases thanks to fairly extensive use of bursaries. The Lewis team reported (1971, p. 6.6) that fully half the students at the Dar es Salaam Technical College have such bursaries "from particular employing establishments," while the Unesco situation report just quoted indicates (*Tanzania*, 1973, p. 9) that University students' tuition and boarding fees are "fully covered by Ministry of Education bursaries" while stating, with regard to primary school fees, that at present (1973, p. 3) "exemption is allowed in case of need."

Why, one wonders, has the policy on fees been so unclear and unsure? Why the double accounting (University students pay fees but receive bursaries) and the apparently ill-defined charity (at the primary level, exemption is allowed "in case of need")? The situation is not made any clearer by contradictory information regarding the financial contribution of private schooling. The Unesco situation report indicates (*Tanzania*, 1973, p. 9) that, in 1970/71, "virtually all [expenditure on education] was financed by public resources, the share of private education being negligible." Yet official figures quoted in Preliminary Education Projects for the Third Plan (1974, Annexes 1, 4, 7, 8) show that while enrolment in private primary education dropped by more than one third between 1969 and 1973 (with public primary enrolment almost tripling in the same period), private enrolment at the much more expensive secondary level was more than doubling (with public secondary enrolment only increasing by about 50%).

An apparent internal contradiction concerning fees in the Unesco situation report does nothing to clarify matters, finally. Although affirming (Tanzania, 1973, p. 3) that "Fees, varying from region to region, are charged" for primary education, the report later states (1973, pp. 4-5) that "no fees are charged in public schools." At best, the policy regarding fee income for various levels of formal education seems to be ambiguous. (In fact, it appears--Muncie, 1973, p. 20; Hatch, 1973, p. 11; and Akwenye, 1975, p. 79--that fees have been abolished at primary through university levels. But this only points up the post-1967 vacillation.)

Ambiguity, or at least lack of clarity, also seems to characterize the mobilization of traditional non-governmental sources of financing in the non-formal sphere. On one hand are a number of programs that do charge fees. These include schemes directly linked to the "modern," urban-oriented sector of the economy, such as the National Industrial Training Council's four-month skill upgrading courses reported by the Unesco document on Non-Formal Education and Training in Africa (1973, p. 3) to require a $5.00 fee per student. Fee income is also generated in at least some programs which, although linked to the new, rural-based, non-"modern" and self-reliant leadership, have what has been termed above a heavy structure approach to training. A case in point is the Cooperative College at Moshi. Grabe (1972, p. 56) reports that, in 1969-1970, nearly three-quarters of recurrent expenses were covered by fees paid by governmental and coop bodies sponsoring trainees.

On the other hand are the light structure non-formal programs identified with the new rural leadership, which on the whole derive little if any income from fees. According to Grabe (1972, p. 57) the Cooperative Education Center, which is responsible for such village level work as the correspondence courses, only covered 13% of its 1970 budget with fees. In literacy and adult education schemes, no direct fees are charged, although at the time of Viscusi's visit (1971, p. 35) consideration was being given to such indirect levies as charging a modest price of books for new literates. Hall and Mhaiki report, however, that (1972, p. 45) Government policy was to provide adult education materials free of charge.[4]

In summary, policy and practice concerning the use of traditional non-governmental resources for formal education have been ambiguous, vacillating with regard for example to fees (until recently) and the role of (secondary) private schools. Non-formal programs have also been unclear in this area, with some (those with a heavy structure, whether urban-oriented and "modern" or rural and non-"modern") charging fees, while others (light structure, rural, non-"modern") do not.

Contrasting with the ambiguity of formal and non-formal education regarding traditional sources of non-governmental financing, the implementation of education for self-reliance has involved a number of innovative constraint-stretching efforts to achieve some measure of self-financing. A common feature of these efforts is that they involve contributions in kind and particularly in work, thus reflecting the self-reliant philosophy's stress on labor-intensive rather than capital-intensive development.

---

[4] Viscusi (1971, p. 35) suggests that "charging a small fee [for books] may be beneficial; people may value a book they purchase more than one they are given. . . ." Is not such an approach in direct opposition to the precept of self-reliance as propounded in the Arusha Declaration, which downgrades money and stresses the value of human effort as more important for development than financial investment?

In formal education, there has been a clear three-fold policy in this respect. First is the role of the community in school construction. The second Plan (1969, Vol. I, p. 149) provides that "all rural schools [constructed during the plan period are] to be built with a maximum of self-help," and the Lewis group (1971, p. 4.4) reported that "capital costs for schools are expected to be substantially lower . . . because local communities will contribute labor and some materials." Sochor (1970, p. 12) says that a school he visited near Mwanza "boasts two adobe classroom buildings built by the villagers themselves" and such efforts appear to have become fairly widespread in the country. According to Freyhold, Sawaki and Zella (1974, p. 4) school building is a major feature of a "strong and lively tradition of self-help" even among the Chagga, often said to be individualistic. Akwenye (1975, p. 81) reports that in the 1969-1970 financial year 178 primary classrooms, 97 teachers' houses and 12 TAPA primary schools were built nationwide with voluntary labor, although he calls this achievement "financially . . . a drop in the bucket."

The second and third aspects of the policy of moving towards self-financing in formal education arise from an understanding of the relationship between youth's demographic importance and the Western-imposed notion of young people's productive potential. Odia (1971, pp. 13-14) points out that half of Tanzanians are under 14 years of age, i.e., in a category Europeans and North Americans generally consider to be incapable of productive economic activity. The policy of education for self-reliance refuses such strictures, however, and provides that schools shall be units of economic as well as educational activity.

The second aspect of the self-financing policy refers to efforts, particularly at primary and secondary levels of schooling although apparently less (if at all) at the post-secondary level, to achieve self-maintenance and self-sufficiency. Hatch (1973, p. 70) states that primary schools "are as self-reliant as possible, i.e., providing food and repairs that are needed at the school," and secondary schools (1973, p. 72) "must be as self-reliant as possible in terms of maintenance and subsistence." Also at the secondary level, student teachers at national colleges of education are reported by Lewis (ed.) et al. (1971, p. 4.10) to engage in "productive activity in growing food and maintaining their buildings." Eliufoo (1969, p. 243) reports a trend for secondary pupils to "take over all the school cleaning duties and to repair school tables, chairs and other equipment." Although working from somewhat fragmentary data, Akwenye (1975, p. 90) does give at least the beginnings of a national overview of the situation obtaining in primary schools in the early 1970s.

> In almost all cases, school-produced farm products supplement the school diet and any surplus is sold with the money used in various ways. Part of the money received from these cash crops has been used for the construction of additional classrooms and teachers' quarters. Numerous schools have been able to produce enough food to make them self-sufficient for an entire year. Others, especially in the Southern region, grew sufficient food

> to make it unnecessary for pupils to ask their parents for lunch money. Similarly, schools in the Dodoma region earned over US $9,000 from the sale of agricultural produce in 1970.

There is some skepticism as to the potential for meeting these aims in a school. The (non-Tanzanian) principal of a teacher's college told Muncie (1973, pp. 16-17):

> We aren't self-reliant and the schools can't live by themselves. Schools are different from other institutions. There's a prison near here which is self-supporting. We can't be. How could we teach here if, for instance, the students had to go milk the cows everyday?

Despite such skepticism, President Nyerere affirmed as early as 1970 that the material base for self-supporting schools was being laid. He said ("Nyerere," 1970, p. 5) "Now, almost every school has its own farm to supply its needs."

The final form of school self-financing is productive activities undertaken by students in and/or for the community (or nation) at large. Such activity often takes the shape of various kinds of practical learning-related work that also have economic value. Thus the Lewis team reported (1971, pp. 6.10-6.11) a proposal to locate a Center at Dar es Salaam Technical College for supplying "simple equipment for use in instruction in secondary schools" so that College students could "participate in the design and construction of the equipment"--an activity of probable economic value. Of perhaps greater economic potential are the considerable periods spent off-campus in intensive work situations by (for example) students of the University's Agriculture School, to which should be added (Muncie, 1973, pp. 19-20) daily work with ujamaa villagers near the School. Activities such as farming (the National College of Education operates a small poultry farm--Lewis (ed.) et al., 1971, p. 4.24) may also be expected to have an economic value.

To what extent such value offsets the costs of education is not immediately apparent. For one thing, although practical work may be considered as complementary to theoretical instruction in the overall pedagogy, it is also--when viewed from the point of view of its economic worth--deemed a potential threat to learning. Odia says that, in general,

> The produce of the farm is expected to contribute something towards the school's total cost, but the national education authorities are determined that such activities should not cause any falling-off in academic standards.

Secondly, it is obvious that, whether undertaken on school premises or in the community, productive activities are not cost-free. Muncie (1973, p. 20) points out that while practical work doubtless offsets part of education costs it also incurs additional expense. He quotes a Dar es Salaam University Agriculture School lecturer to the effect that "even a ten-week practical [off campus] is very expensive. Transportation is expensive, the tents they live in are expensive, maintenance is expensive."

Considering these and other problems it seems unlikely that various kinds of productive activity undertaken by institutions of formal education are yielding output of sufficient value even to approach the costs of such institutions. Although insufficient data have been obtained to do a proper cost: benefit comparison, a single case may--assuming it is reasonably typical, which may not be so--shed at least tentative light on the issue.

Sochor (1970, p. 12) found that the pupils of a primary school he visited at Badugu, near Mwanza, were cultivating a two-acre cotton field and a four-acre maize field. In 1969, the pupils raised the equivalent of $85 by selling their cotton. Even assuming this was net profit (which it was most likely not, since seeds and tools had probably to be paid for), the value was only equivalent to 3.7 times the average national public annual recurrent expenditure per primary school enrolee in the 1972/73 academic year ($22.82--see first half of this chapter). Since the school had 305 pupils at the time of Sochor's visit, it will be seen that cotton production yielded the equivalent of something on the order of only one per cent of recurrent costs. Assuming that maize production (figures not reported) had an equivalent value-per-acre to cotton, and taking into account that there were twice as many acres of maize (four) as of cotton (two), one may hypothesize an overall direct return[5] on the school's productive efforts equivalent to about three per cent of its recurrent cost--a marginal contribution (in the non-economic sense) to offsetting those costs.

On the whole, with regard to self-financing of formal education, it would appear that although community participation in school construction was expected to achieve a reduction in per unit capital costs, the other two aspects of self-financing--student labor (a) for self-maintenance and self-sufficiency of educational institutions, and (b) for the provision of goods or services in and/or for the community or nation at large--only made limited progress toward offsetting recurrent costs.

---

[5] "Direct return" refers only to market value of the crops and thus excludes from the benefit side of this example such predictable value accruing from productive work as increased lifetime functionality on the job (skills acquired) or as a citizen (attitudes acquired). Even if the value of such functionality as much as doubled the return from productive work, the total return would still be well under ten per cent of recurrent cost of education at that school.

A similar pattern of self-financing efforts seems to characterize the non-formal sphere, although with perhaps sometimes rather different cost:benefit results. Non-formal learners and the broader community participate in construction or extension of facilities. Hall and Mhaiki (1972, p. 23) refer to the activities of the Tanganyikan African Parents Association (TAPA) in building shelters for literacy classes, and Viscusi (1971, p. 8) reports that in a pilot sub-area where participation in and enthusiasm for literacy courses were particularly high, students in two locations had put up buildings for their own and future classes--"an impressive monument to the learners' determination. . . ." Muncie (1973, p. 28) notes that students at the Humbolo Rural Training Center (Dodoma Region) constructed sheds for carpentry and masonry classes, although it may be wondered how much of the $200,000 unit price he reports for RTC's (for 80 resident students) can be offset by such work.

The principle of self-maintenance and self-sufficiency has been made explicit in non-formal schemes. A Unesco document entitled *Quelques Réflexions sur les Activités Educatives dans les Milieux Ruraux des 25 Pays les Moins Developpés* (1974, p. 30) states that "labor in the RTC farms will be supplied by trainees; each Centre is expected to be self-sufficient." According to calculations made earlier in this chapter, it appears that recurrent costs of Rural Training Centers are fairly high, possibly higher than those of formal instruction at the secondary level. It may, then, be asked whether RTC's, or any heavy structure residential non-formal programs, can reasonably be expected to pay their own way. In one case, at least, progress has been made in this direction. Hall and Mhaiki (1972, p. 15) report that, at Kivukoni College,

> . . . self-reliance is translated by the participation of students in dish-washing. They also work on the school farm where animals and fowls are raised, and cashew nuts, coconuts, pineapple, citrus fruits, papayas and vegetables are cultivated. The greater part of the food consumed by the students is produced in the College's farm.

Kivukoni may, however, be an exception since, as Hall and Mhaiki point out themselves, it "has been in the vanguard of socialist innovation in Tanzania for several years."

Productive work seems quite widespread in non-formal programs. At the Ministry of Agriculture Training Institutes, for example (Muncie, 1973, pp. 23-24), students spend a total of eight of 18 months' study doing practical work off-campus in ujamaa villages. During the remaining ten months on campus, roughly half their time is spent in practical productive activity, giving a total of the equivalent of about 13 of 18 months of study engaged in work.

Work is also an integral part of the Literacy Campaign. Viscusi (1971, pp. 7, 24) notes that classes have their own shambas (plots) which are worked both during demonstration sessions and between sessions. How productive these plots are is not clear from available literature, but they do yield some income at least occasionally since Viscusi reports that one of the tasks of class committees is to decide "how to spend any money that may be realized from the demonstration plot."

As already noted with regard to pedagogy, the stress of the 1973 radio health education campaign was on motivating members of study groups to act, individually and collectively, to improve the village health environment. Extensive action does seem to have been stimulated in this way. According to "Large-Scale Multi-Media Health Education Campaign in

Tanzania" (1973, p. 12), numerous projects were undertaken in such fields as filling in mosquito breeding grounds, killing bilharzia-bearing snails, latrine construction, market cleaning, etc., which might not have been carried out without the stimulus of the campaign.

In two ways, the National Service is also a productive scheme. Hatch (1973, p. 76) indicates that the Service undertakes "road-building, clearing land for Ujamaa settlements, and community projects" among other activities. Secondly, Servicemen working in salaried positions only receive 40% of the salary above a $25 monthly subsistence stipend ("National Service," 1967, p. 3) with the remainder reverting "to the National Service for the training of others," according to Hatch (1973, p. 76). It should be pointed out that, although an ingenious (and probably successful) way of achieving a measure of self-financing, this method involves the transfer of existing resources rather than the generation of new wealth. (This does not take into account the economic value of the informal education received during Service, and particularly attitude changes counterbalancing the "snobbishness" learned by students at the University--cf. Biswalo, 1973, p. 79).

On the whole--and this can only be an impressionistic conclusion--it would seem that two kinds of results may be being achieved with regard to self-financing of non-formal programs. First, given their relatively high cost, residential heavy structure schemes (such as Rural Training Centers and Ministry of Agricultural Training Institutes) are probably not offsetting full recurrent, much less capital, expenditure, although some are likely to be doing better in this respect than schools both because of greater proportions of time spent on productive work (e.g., the

MATIs and National Service) and because of more militant attitudes toward self-reliance (e.g., Kivukoni College).

Secondly, light structure non-residential programs (such as literacy and the radio education campaigns) may be achieving a considerably greater measure of self-financing than either schooling or the heavy structure residential non-formal schemes just mentioned. This likelihood is due to two factors. On one hand, nearly full self-financing of capital investment is much more possible: a literacy class shelter can be put up by villagers much more quickly and cheaply than a school or residential center. On the other hand is the stress--in aims and timing--on productive work, coupled with relatively low recurrent costs. Given the widespread community development action that resulted from the 1973 radio health education campaign, for example, it is entirely possible that the 1.7¢ expense per enrolee hour (see first part of this chapter) was more than offset by the value of work undertaken by campaign participants. Indeed, the Institute of Adult Education affirms (*Mtu ni Afya--An Evaluation*, 1974, p. 85) that, taking into account latrine construction alone, the amount of labor mobilized was "staggering." Assuming that 50 man-hours are required to build a latrine, and given that 750,000 latrines were constructed as a result of this campaign, the number of man/hours mobilized was 37.5 million.

> If the Ministry of Communication and Works would have had to pay to have this work done at a rate of roughly one shilling per hour, the cost would have been 37.5 million shillings. Bearing in mind that the campaign cost about 1.5 million shillings, the economic advantage is clear. Realizing that latrines were only one of the activities of the groups, one can begin to grasp the impact of this campaign. . . .

In summary, the principle of achieving at least some measure of self-financing of both formal and non-formal programs has been made explicit in line with the policy of self-reliance. In practice, formal education and non-formal programs attempt to apply this principle in one or more of the following ways: community and/or learner participation in plant construction; self-maintenance and self-sufficiency of educational institutions; productive work in and/or for the community or nation at large. Formal education seems to have made only limited progress toward the goal of self-financing, however. Residential heavy structure non-formal programs, although possibly doing better than formal education (because of greater stress on work and more militant attitudes), are probably not offsetting their relatively high recurrent, much less capital, costs. In contrast, light structure non-residential programs may well nearly or fully be offsetting at least recurrent costs because of (a) the ease of labor-intensive capital self-financing in their case, (b) relatively low recurrent costs, and (c) the stress on productive work.

Conclusions

A first conclusion to be drawn here is that there are evident similarities of approach and practice regarding the financing of formal and non-formal education concerning, in particular: the attempt to cut capital costs in line with the policy of education for self-reliance through use of a common facility (the Community Education Center), the overlap of lower ranges of formal education instructor salaries and the upper ranges of non-formal leader remuneration; the likeness of middle and lower levels of hourly costs per enrolee correlating with learners' socio-economic status and functions; the common use of primarily public funds; an approach to traditional sources of non-governmental resources inherited from the colonial period shared by formal education (until recently regarding fees, and with continuing ambiguity about private secondary schools) and the heavy structure forms of non-formal education (whether "modern" and urban-oriented or non-"modern" and rural); and the explicit aim of self-financing and its implementation according to a three-fold pattern (plant construction, self-maintenance and self-sufficiency, productive work).

On the other hand, definite dissimilarities also appear with regard to: the much greater rate of growth of non-formal education than in formal schooling (astronomically greater in recurrent spending, and leading some observers to wonder if expenditure on non-formal programs would not prevent achievement of universal primary education by the target date 1989); the wide divergence between the lower and lowest levels of remuneration of non-formal leaders and the salaries of the bulk of formal instructors; the high per-enrolee hour cost of university education, which trains for a socio-economic role far above the audience range of most non-formal programs; a certain confusion regarding the economic significance of formal education (conceived of as a consumption item or at best an investment yielding only long-term returns) contrasting with the assumption that non-formal programs will yield short-term economic benefits; the refusal of light structure non-residential non-formal programs to use traditional non-governmental resources compared with the continuing use of such resources by formal instruction (and heavy structure residential non-formal programs); and the moderate to (possibly) considerable success of non-formal education in achieving self-financing as against the limited success of formal education in this area.

Thirdly, there seem to be a number of special affinities between the financing of primary education and that of non-formal programs (including overall priority in national budgeting and instructor remuneration overlap) and particularly light structure non-residential non-formal schemes such as literacy, adult education and radio education campaigns (the shared Community Education Center, hourly costs per enrolee, and learner audiences--the common rural citizen). Given these similarities, one wonders if the opposition between spending on primary education, on one hand, and adult education, on the other, suggested by the Lewis team (1971, p. 3.2) is really a helpful frame of analysis. In an earlier chapter, we have seen how primary schoolteachers are being massively trained and used for non-formal instructional tasks; here, we have dealt with the proposal for a common village-level formal/non-formal facility, the Community Education Center. Increasingly, then, it would appear that resources for primary education are simultaneously resources for light structure non-residential non-formal programs. The two kinds of education are closely complementary, even identical in certain respects, much more than opposed, in financial terms at least. Perhaps it would be useful, intead of placing them in opposition, to examine how their complementarity--or identity--could be enhanced. In particular, with regard to financing, one could ask such questions as how primary schools could learn from light structure non-formal programs to achieve a greater measure of self-financing?

In fourth place, just as there are affinities between primary education and light structure non-residential non-formal programs so similarities appear, with regard to financing, between secondary schools and the heavy structure residential non-formal programs,[7] whether the latter train for the urban-oriented "modern" sector or the rural non-"modern" sector. Among these similarities are: capital expenditure not always in line with the implications of the policy of education for self-reliance; relatively high instructor salaries (the highest in the non-formal sphere); hourly cost per enrolee (non-formal dearer than secondary); middle-level socio-economic status and functions of learner audience; use of traditional non-governmental resources; not fully successful self-financing.

These conclusions raise, in turn, a number of important questions about the relationships between different kinds and levels of formal and non-formal education, and between them and the two opposing models of development extant in Tanzania: the urban or urban-oriented model of "modernization" reflecting Western concepts of development, and the alternative rural-based non-"modern" model expressing the authentically Tanzanian concept of self-reliant *ujamaa* socialism. Does it not seem that the complementarity (or incipient merger) of primary schooling and light structure non-residential non-formal programs corresponds, in terms of financing, more closely to the precepts and implications of self-reliant socialism than to the urban-oriented "modern" model? Both this complementarity and self-reliant socialism feature or require: a stress on providing minimum education for all (expressed here in budgetary terms); the integration of education and village life (e.g., through the Community Education Center); the appeal to an audience of common rural people; and relatively modest instructor remuneration and costs per learner (so as to achieve greatest possible coverage).

---

[7] To keep concepts in perspective, it is well to recall that a Rural Training Center for 80 residents requires a capital investment of $200,000 (Muncie, 1973, p. 28) while the average primary school unit serving several hundred pupils costs $35,000 (Lewis (ed.) et al., 1971, p. 4.4) and the capital cost of a Community Education Center, offering education--and other services--to adults as well as children, is on the order of $52,500 (*Preliminary Projects for the Third Plan*, 1974, Annex 14).

Conversely, is it not possible that the similarities, with regard to financing, between secondary schools and heavy structure residential non-formal programs tend to correspond more closely to the style and substance of the "modern" urban-oriented model of development than to those of self-reliant socialism? We have seen, for example, that: capital expenditure has not always been in line with the implications of self-reliance; salaries are relatively high, as are costs per enrolee hour (thus limiting extension) and self-financing seems to be having, at best, only moderate success.

It is perhaps natural that non-formal schemes designed to feed the "modern" urban sector (e.g., civil servant training, management training, etc.) should reflect, in their policies and practices of financing, the approach of the urban-oriented "modernization" development model. Indeed, to some extent they may constitute a kind of para-secondary school, perhaps being non-formal mainly because they are not administered as part of the formal school system. But is it not curious--perhaps disquieting--that institutions such as the Rural Training Centers and Cooperative College, whose function is to train the rural vanguard for implementing self-reliant socialism, should reflect the opposing model of development, at least as far as certain aspects of their approach to financing are concerned?

CHAPTER VII

ORGANIZATION OF EDUCATION

How has Tanzanian education for self-reliance been organized?[1] Enunciated by President Nyerere in 1967 (paraphrased in Hatch, 1973, p. 93), the overarching principle in education as in other areas is that "the role of the government is to serve the people, not vice versa. . . ." In itself, this principle marks a sharp departure from the attitude of many African and other Third World governments which arrogate to themselves what few fruits accrue from urban-oriented "modernization." Is Tanzanian organizational practice as original as its principle?

More specifically, how are education planning and evaluation treated? How is the responsibility for education distributed? And what kinds of relationships are there among different kinds and levels of educational authorities?

Planning and Evaluation

Rather than undertake a tedious review of machinery and procedures, this section focuses on more qualitative aspects of the process of designing and assessing education. It asks in particular: In what spirit is planning carried out? And what are the kinds and roles of evaluation?

Since well before opting for a policy of education for self-reliance, Tanzania stressed the need to harness schooling to development through educational planning. But the spirit in which this has been done has changed considerably over the years. After Independence in 1961, the authorities accepted the then internationally prevalent assumption that, to serve development, educational planning must focus on meeting manpower requirements. Skorov (1966, p. 37) points out that

---

[1] "Organization" defined as internal flows of learners and sequencing of learning was covered in Chapter III.

> Tanzania was among the first African countries to realize that her economic development would be doomed to failure without a vigorous effort directed at meeting manpower needs, especially those of highly qualified manpower.

He also deems (1966, p. 65) that "Tanzania is one of the few African countries to have achieved a considerable measure of success in integrating educational planning with economic planning" especially in the manpower area.

This concept of the purpose of educational planning was propagated thanks largely to the influence of a succession of missions by foreign experts, including G. Hunter (London Institute of Race Relations, 1962), G. Tobias (Ford Foundation, 1963), R. Thomas (Ford Foundation, 1965) and Skorov himself (Unesco, 1966). Although differing in certain respects (Skorov, 1966, pp. 21-34), these experts concurred--and convinced the Tanzanian Government--in three basic respects.

First was the assumption that development was a phenomenon predominantly concerned with economic growth. Second was the idea that development, so defined, can only be achieved by the constitution of a corps of highly skilled technicians who are charged with the stewardship of designing and bringing about the well-being of the rest of the population. Thirdly, as a consequence, the essential role was to train that corps of technicians. This meant, in Skorov's words (1966, p. 65) that education must not "simply pursue the ideal of having the greatest number possible receive schooling." He salutes as "far-reaching" the

> . . . decision by the authorities not to allow the indiscriminate expansion of education--the results of which are often ephemeral--and to confine, for the time being, the growth of primary education . . . so as to be able to give top priority to secondary education, which is seen as the keystone for buildind the structure of high-level manpower for development.

Skorov predicted (1966, p. 35) with equanimity that this orientation "cannot be changed significantly" less than a year before the declaration on education for self-reliance was to stand this technocratic and anti-democratic policy on its head. Other international experts were, however, more clairvoyant. Mwingira and Pratt (1967, p. 38) felt it necessary to remind the Government that

> Projects to cope with the . . . type of educational demand which might be termed "popular" rather than "economic" must also feature in the Plan if the Plan itself is to be popular.

As long ago as 1962, Hunter wondered if the stress on classically-defined high-level manpower wasn't being overdone, and suggested (Skorov, 1966, p. 22) that "the farmer himself . . . should be considered as a kind of high-level manpower." (This may be interpreted as a technocrat's attempt to force reality into his narrow mold--can one really conceive of a subsistence level farmer as high-level manpower?--when he should in fact have broadened his mold to suit reality.) Skorov himself (1966, p. 35) recognized the "real danger [of creating] a dual economy based on a large, stagnant traditional sector, and a small dynamic modern sector."

As we have already seen (particularly in the chapter on goals), the policy of education for self-reliance gave pre-eminence to ideological rather than narrowly economic considerations: man rather than money was to become the centerpiece of development.

Quoting President Nyerere, Musoke (1971, p. 2) points out that

> The only resources we have in abundance . . . are the land and the people to work the land. The role of the Government, therefore, is to help the people make a success of their work.

Underpinning the second Plan's shift of emphasis from post-primary to primary education, this new concept is humanistic in that it does not merely view the learner as a producer or c fer. In the words of the Plan itself (1969, Vol. I, p. 8) "Educational planning is not just a matter of setting targets for the number of students to be in school. . . ." Further, TANU's 1971 Guidelines (quoted in Hall, "The United Republic . . .," 1974, p. 513, emphasis added by Hall) stated that "It is not correct for leaders and experts to decide on an issue just because they have the expertise."

Given the humanistic and anti-technocratic reorientation of thinking, one would logically have expected the new spirit to permeate policy and particularly planning. During the second Plan, this does not in fact appear to have happened as fully as could have been hoped. The Lewis team (1971, pp. 1.8-1.9) point out that

> As in the case in nearly all developing countries, the training of technicians and other sub-professional manpower is a still unsolved problem [since] highest priority is given to investment in high-status university level professional education at the expense of adequate provision for the larger number of lower status supporting personnel who are urgently needed. . . . A country whose development and whose sytem of learning is oriented to improving the level of living of all the people certainly should have a more broadly based system for manpower analysis.

With regard to evaluation of formal education, it is evident from the continuous evolution of Tanzanian education that decision makers in this field--and others concerned--are far from complacent. Vacchi (1973, p. 108) refers to the self-critical and self-evaluation conversations she had with government officials and teachers throughout the country. To a certain extent, the assessment process has been formalized and structured, and linked to the decision-making process. Kinunda (The Place of Evaluation . . ., 1974, pp. 14-16) reports for example that "great importance" has been given, in the framework of a Unesco-Unicef project, to evaluating the effectiveness of syllabuses, instructional materials and processes, and teacher upgrading as a precondition to reorientation of primary education, and reports that evaluation has led to "changes and adjustments" in the project. He points, however, to numerous defects in evaluation, both human (fluctuating presence of foreign personnel, insufficient competent Tanzanians) and methodological (late start of evaluation and consequent lack of baseline work). Similar shortcomings in a secondary school curriculum reform project resulted in "very limited or incomplete evaluation or [no] evaluation at all."

A different problem is whether evaluation assesses the internal success of educational systems as compared with their external impact. Of late, it seems that--as is generally the case in other countries--evaluation is perceived chiefly as an instrument for perfecting the internal functioning of education. The Lewis group (1971, p. 4.19) reports that a function of the national organization of examinations is "to evaluate the effectiveness of the course," with "effectiveness" being interpreted in terms of academic promotion within the school. Thus, when the failure rate on A level science and maths examinations in 1969 was deemed "excessively high," the Government took measures to reshape the teaching of science and mathematics.

On the other hand, rather less attention seems to have been given to assessing the impact of education on society. The distinction is vital since an internally functional education system could quite conceivably be producing socio-economic results at odds with the nation's educational goals. The Lewis team found (1971, p. 4.26) a conspicuous lack of evaluation of formal education along such lines. There were, for instance, no data on the "extent to which [primary school] graduates stay in their community and contribute to its success;" nor were there "tracer studies [on] teacher college graduates who enter and continue in teaching to measure their success" and thus the success of their training.

The pre-1967 planners' approach to non-formal education complements their thinking in the formal sphere. King (1967, pp. 39-40) affirms that "programmes and individual projects are most successful when . . . non-formal education is seen as a means to economic rather than purely cultural or social ends." Recalling Skorov's above-quoted disdainful reference to the "ephemeral" results of the "indiscriminate expansion of education," King's downgrading of "cultural or social ends" betrays the technocrat's discomfort with what he (or she) cannot quantify or predict, and his (or her) consequent underestimation of such qualitative factors as conscience, aspirations and ideology which are also important in determining the course and nature of individual and national development. Perhaps because of its limited importance for planners' economy-centered concerns, non-formal education did not figure more than marginally in pre-1967 educational planning in Tanzania. Skorov (1966,

p. 51) remarks that "educational planning in Tanzania is, in practice, concerned only with formal education. . . ."

With the advent of the policy of education for self-reliance, one would logically have expected a change in this situation, both because of the new policy's stress on democratization of education and for economic reasons. Regarding the latter, London (1973, p. 451) says that while higher levels of skills have tended to attract intensive educational action,

> . . . it now appears more and more clearly that a certain priority must be accorded to the education of peasants and workers if . . . persons with little or no schooling are to be enabled to participate more effectively [in the economy] by increasing their productivity. . . .

Careful preparation does in fact seem to take place in the non-formal sphere, but it is programming rather than planning since it seems to be carried out at the sectoral (institutional or project) level rather for non-formal education as a whole, and generally for a shorter time span than national planning of formal instruction. For example, Hall and Mhaiki (1972, pp. 38-39) report the painstaking planning of the Time of Rejoicing radio education campaign, which began some 11 months before the first broadcast. But there is no indication of overall long-term planning of radio education activities (a total of four campaigns in the second Plan period), nor--on a broader scale--of global planning of different programs in the non-formal sphere.

Given this lack, and the continued priority preoccupation of planners with post-primary education in the formal area, one may wonder if there is not something fundamentally incompatible between the high-level manpower-oriented spirit of contemporary educational planning in

Tanzania and the democratic and humanistic spirit of the policy of education for self-reliance. In sum, it seems plausible to say that educational planning still tends to serve the "modern" urban-oriented notion of development that is not notably compatible with self-reliant socialism.

As in the sphere of formal instruction, evaluation of non-formal educational efforts has not been without problems, perhaps the chief of which was a late start. Grabe (1972, pp. 63) reports that "no qualitative evaluation has yet been made [by 1972] of the benefits accruing from the Tanzanian system of cooperative education," although an evaluation was planned to take place with Scandinavian aid. This evaluation appears to have been completed, although its results are not yet available.

A similar "late start" pattern characterized the experimental literacy project. Kinunda for one (*The Place of Evaluation* . . ., 1974, p. 26) points to serious problems accruing from lack of baseline data. Viscusi (1971, p. 29) stresses that, although evaluation should ideally be

> 'First to come, last to go, and intimately connected with project operations throughout.'. . . The history of the evaluation function of the Tanzanian project [until early 1971] nicely illustrates how, in the field, reality often takes over from theory. As a result, the evaluation team [was] formed only towards the end of 1970 [i.e., after two years of operations, and] had to devise means of evaluating the results of a project when it was already in full operation.

Once in operation, however, the literacy evaluation unit seems to have become a fairly efficient, and integrated, component of the overall project. According to Viscusi (1971, p. 31) "this integration was based on mutual understanding and shared goals," perhaps uppermost of which was to ensure that feedback from evaluation would influence decision-making. Odia reports, for instance (1971, p. 22), that a "study of the reasons for drop-outs has enabled the [literacy] project to be improved in a number of respects."

Evaluation of the radio education campaigns has been carried out with considerable care including questionnaires, tests, seminars, and baseline data although--in the case of the Time of Rejoicing Campaign, at least with apparently no control groups and a rather small sample (of the 50 groups sampled--of a total of 1,500--only 12 returned pre- and post-campaign results; Hall and Mhaiki, 1972, p. 48). Evaluation affected decision-making directly, for example leading organizers to include in the 1973 health campaign community action projects that had been absent from the 1971 Time of Rejoicing effort. The design and implementation of the 1973 campaign's evaluation (*Mtu ni Afya--An Evaluation*, 1974) shows marked improvement, happily without falling into the trap of costly over-sophistication.

An important feature of evaluation of non-formal programs has been the attempt to assess external as well as internal results. In some instances, this balance did not exist from the beginning. The Time of Rejoicing campaign's evaluators sought chiefly (*Preliminary Results*, 1972 (?), p. 2) "to determine whether knowledge gain has taken place during the campaign," an internal evaluation that does not refer to whether or how such a knowledge gain (or other result of the campaign) changed participants' lives. In contrast, the evaluation of the 1973 health education campaign ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 13) aimed to determine not only "the knowledge gained [but also] changes in health behaviour" that resulted. From the outset of its work, the literacy evaluation unit has been mandated to strike a similar balance between assessing internal success and external impact. According to Viscusi (1971, p. 29) it calculates the "effects, both short- and long-term, which such a programme should have on [e.g.,] cotton yield as well as other aspects of learners' lives if it is to be successful." Mbakile (1974, pp. 461-463) notes the practical and methodological difficulties of carrying out such evaluation but indicates that it is continuing.

In summary, the long-term global planning of formal education has existed effectively at the national level since before 1967. It tends to be technocratic and elitist, in that it focuses on providing high-level manpower through post-primary training, and seems therefore to reflect a "modern" urban-oriented notion of development. In contrast, individual non-formal programs and projects tend to be carefully prepared on a short-term basis (programming), at least where they are consistent with the humanism of self-reliant socialism and seek to reach the rural non-"modern" strata of society (e.g., radio education and literacy). But there is no global long-term planning of non-formal education as a whole.

Evaluation of both formal and non-formal education has been plagued by numerous problems, perhaps most serious of which was a generally late start in evaluation compared with evaluated efforts to (re-) orient education in line with the policy of self-reliance. In both formal and non-formal spheres evaluation does now take place, however, and has direct influence on decision-making. Evaluation of formal education stresses assessment of internal success, while non-formal evaluation strikes something of a balance between assessments of internal success and external impact.

Distribution of Responsibility

What are the responsibilities of the Government, the private sector, para-statal agencies and auxiliary bodies? The Government has chief responsibility for implementation of plans and policies regarding formal education. As in the past, responsibility for secondary and higher education and teacher training has, since 1967, remained with the Ministry of National Education in Dar es Salaam. Responsibility for primary education has, while remaining governmental, been transferred to the regional level during the second Plan period under a new policy of decentralization discussed below.

By and large, the role--and particularly the autonomy--of private education in Tanzania has diminished of late. In 1970 (Hatch, 1973, p. 59) almost half primary schools were still run by missionary or private interest groups. In that year, however, the Government took direct control "chiefly by employing all teachers and school administrators in the civil service" and the Government document Who What Where in Tanzania (1971 (?), p. 28) stresses that all private schools "have to teach the government approved curriculum." Despite this increased supervision, private education is far from moribund, judging from Ministry of Education enrolment figures reproduced in Preliminary Education Projects for the Third Plan (1974, Annexes 4, 7, 8). While private primary education does seem slated for extinction (Standard I enrolments in private primary schools dropped by half between 1969 and 1973), private secondary education is thriving (Form I private enrolments almost doubled between

1969 and 1973, while Form I public enrolments increased by about 10% in the same period, increasing private Form I enrolments' share to over one-third of all enrolments in 1973).

These figures seem to lend credence to the idea (discussed in Chapter III with regard to access to education) that private secondary education, even if its content and instructors are closely controlled by the Government, may offer the affluent urban stratum of society a means of escaping the full force of the official policy of limiting the growth of secondary education in the name of egalitarianism. The mushrooming of private secondary education suggests that, for the time being at least, the escape route may be trod--and privilege may perpetuate itself--with impunity.

The University of Dar es Salaam is the major para-statal body having responsibility for education in Tanzania. Differing interpretations of the extent of this responsibility, coupled with student demands for participation in decision-making, have been at the source of tensions between the University, on one hand, and the Government, and TANU and similar socialist-oriented bodies, on the other hand.

Before the adoption of the policy of education for self-reliance, there was, in the words of Mwingira and Pratt (1967, p. 19) "no formal relationship between the University [of East Africa, of which Dar es Salaam was one of three campuses, with Nairobi and Makerere] and the governments [of Kenya, Tanzania and Uganda] regarding the response of the university to expressed government priorities."

The ambiguity continued even after the creation, in 1970, of the independent University of Dar es Salaam. President Nyerere (quoted in

Lewis (ed.) et al., 1971, p. 8.12) urged that

> Participation is the cornerstone to the building of Socialism. And since the University has been committed to help contribute toward the construction of a socialist society in Tanzania, it had to evolve a machinery conducive to the attainment of such a goal.

Perhaps, however, student motivations are not so pure as such lofty declarations might lead the observer to believe. Traditionally, the student body has been at the pinnacle of both the education system and the socio-economic power structure. Surveying between one third and one quarter of students on campus,[2] Ishumi found (1973 (?), p. 22) that while 27.3% said their prime interest was "academic" or "vocational" and 13.6% declared themselves "ambivalent," fully 34.8% were chiefly concerned with "social" or "collegiate" pastimes. This left less than a quarter (24.2%) whose major concern was "non-conformist" or "revolutionary." Since the tenets of self-reliant socialism are a direct threat to the privileged status of the student elite, and since revolutionaries are a minority in this elite, it has reacted with understandable hostility to socialist measures. During the demonstrations of 1966, students carried placards with proclamations like "Life was better under the colonialists" (quoted in "Nyerere," 1970, p. 6). Significantly, the object of student ire in 1966 was, in the words of Vacchi (1973, p. 96), "not military service, or possible political indoctrination, or regimentation [but] the 18 month stint at half salary" which had just been instituted for graduates in the National Service.

It seems possible that the situation has not changed greatly since the inception of education for self-reliance, although student declarations are less blatantly favorable to the maintenance of privilege. Thus instead of referring nostalgically to the colonial era, a President of the Dar es Salaam University Student Organization attacked the creation of TANU Youth League branches on campus with the argument (quoted in "Tanzania: DUSO's New Executive Declares War on Corruption," 1973, p. 8) that "power in Socialist-oriented university . . . cannot work successfully if it is permanently placed in the hands of a group . . . directed from outside." Similarly, a root cause of the 1970 disturbances at the University was the fact that the TANU-affiliated Tanganyikan African Parents Association (TAPA)--considered by students to be an "outside" body (Student Participation . . ., 1972, p. 13)--had been consulted by the Vice-Chancellor on student rules and regulations.

---

[2] Ishumi points out that his results may be somewhat skewed (1973 (?), p. 3) since his sample included 13.7% of Kenyans, whose attitudes may have been less revolutionary than the 83.6% composed of Tanzanians.

On the whole, one cannot but wonder whether student demands for autonomy and participation,[3] although couched in socialist terms, are not in fact expressions of a desire to maintain the University as a privileged ivory tower, unresponsive to the major issues facing Tanzanian society and not answerable to the socialist philosophy and bodies that are grappling with those issues.

Certain Government technical agencies have an auxiliary role regarding formal education. The function of Radio Tanzania has already been referred to, for example. The second five-year Plan (1969, Vol. I, p. 24) provides that the agricultural extension service should support such innovations made in line with the policy of education for self-reliance as school gardens and locally oriented craft and trade training, particularly by making selected staff available "to aid in practical and theoretical training in schools."

---

[3] Students can hardly be said to be excluded from decision making since they are present with voice on deliberative bodies at the three major levels of authority at the University: the Council, Faculty Boards, and Senate.

By far the most important auxiliary bodies are, however, non-governmental and political in nature, including particularly TANU, the TANU Youth League and TAPA. TANU is, so to speak, both "upstream" and "downstream" of Government action in formal education. TANU's intervention is "upstream" of Government in that, as the political party, its task (in the words of Nyerere, quoted in the second Plan, 1969, Vol. I, p. vii) "is to determine general policy," including educational policy. But TANU also has a vital function "downstream" of the Government at the implementation level. Particularly through the ten-house cell system (kumi-kumi), TANU operates in the interstices between the people and Government institutions, providing what Hatch (1973, p. 65) calls "the first level of problem solving or dispute settlement in a community," relating also to problems and disputes in the educational sphere.

In this sphere, the party's Youth League and TAPA also have responsibilities. The Youth League works particularly in secondary schools (and the University) as a source of learning and an instrument for expressing political involvement. TAPA, on the other hand, has much broader functions. Already at the time of the publication of Education for Self-Reliance TAPA was reported by Dubbledam (1970, p. 27) to have ambitious aims in formal education, i.e.,

> . . . to advise and rule over all schools in Tanzania . . . to contact all parents, to increase the number of primary and secondary schools, to see that TANU is the ruling party, and to see that all children get education as directed by TANU and TAPA.

Thus TAPA has had a broad variety of functions and responsibilities, ranging from receiving parents' complaints, helping ensure that administrators' decisions are in political conformity with TANU policy, generally mobilizing and expressing public opinion and leading the drive for extension of primary education, and even running its own rural primary schools (Hall and Mhaiki, 1972, p. 23, report the existence of 333 such schools) in continuation of its original 1950s role in struggling against colonialism by creating semi-legal politicized "bush schools." Hall and Mhaiki see in this multiplicity of roles, perhaps leading--it must be said--to a certain blurring of lines and boundaries of authority with Government structures--"a good example of the synthesis [in education] between conventional and unconventional structures." Possibly, however, the multiplicity of its tasks has led to a certain dilution of TAPA's impact in certain key domains. Although Vacchi (1973, p. 105) found that TAPA committees had "sprung up almost everywhere," she noted that "adherence is sometimes tepid or limits itself to the construction of classrooms." While important, such material work (Vacchi feels) "does not involve an effective conscious participation."

As in the sphere of formal instruction, the Government has chief responsibility for implementing programs of non-formal education. But while authority for formal instruction is centered in the Ministry of National Education, no single ministry has a predominant role in the non-formal sphere. To some extent, this reflects an historical division of labor. Mwingira and Pratt (1967, p. 17) reported a distinction between responsibility for formal education (lying with the Ministry of Education) and that for non-formal education (in the purview of the Ministry of

Community Development and National Culture).

Since the adoption of education for self-reliance, however, it is primarily the multiplication and diversification of non-formal education that have led to the present situation of widely distributed authority. From 1969, the Ministry of National Education assumed responsibility for basic adult education programs, with the Ministry's Directorate of Adult education now constituting what Hall (The United Republic . . ., 1974, p. 513) calls "the administrative head of the country's adult education network." Originally under the Ministry of Regional Administration and Rural Development, the experimental literacy project was shifted to the Ministry of National Education, which now has responsibility for the National Literacy Campaign.

As the Lewis team pointed out (1971, p. 13), however, "the nationwide learning system [is] the responsibility of no single ministry." They found no less than ten ministries involved, including (in addition to Education) Communication, Transport and Labor (vocational training for industry), Regional Administration and Rural Development (Rural Training Centers), Agriculture and Cooperatives, Natural Resources and Tourism, Water Development and Power, and Health and Social Welfare (all with training schemes of various kinds). Official figures quoted in Preliminary Education Projects for the Third Plan (1974, Annexes 33, 35) show that the overall share of these ministries in Government education spending between 1969 and 1974 grew at rates that varied from slight (from 17% to 20% of total recurrent expenditure on education) to considerable (from 33% to 48% of total capital expenditure).

Unlike formal schooling, and with the exception of a few enterprises and of certain foreign-financed initiatives, non-formal education programs are not sponsored by private bodies. On the other hand, and also unlike the situation in formal education, para-statal bodies are numerous in the non-formal sphere. They tend to cluster in the industrial sector, where are found production enterprises, said by the Lewis group (1971, p. 1.3) to "have extensive training programs of their own." In 1973, the Prime Minister's office issued a directive quoted by Hall (1975, pp. 12-13) requiring all enterprises to establish plans and budgets for adult education and to allow an hour a day of work time for education purposes. The directive stipulated that non-attendance in classes should be treated as absenteeism from work. Also in the para-statal sector are specialized training agencies, such as the Institute of Development Management, the National Institute for Productivity and the Trade Testing Center (responsible for the National Industrial Training and Apprenticeship Scheme).

An important exception to the urban/industrial context and orientation of para-statals involved in non-formal education is the Institute of Adult Education. Originally located in the University (which itself continues to play a role in training adult education staff), the Institute is now "a national . . . autonomous body with responsibility to the Commissioner of Education" (Hall, The United Republic . . ., 1974, p. 515). It has a number of operational functions, e.g., the organization of the radio education campaigns, leader training and publication of follow-up reading material for new literates. But its most crucial role has been that of "think-tank," carrying out and disseminating the results of research. Unlike such research and development institutions in many other countries, the Institute seems to have had an immediate, continuing and fundamental influence on the direction and nature of non-formal education's evolution. Indeed, it is perhaps not an exaggeration to conclude that the translation of the principles of education for self-reliance into mass rural programs of non-formal education is traceable in good part to the work of the Institute.

Auxiliary bodies have been particularly numerous and active in the field of non-formal education. Hall (Adult Education . . ., 1974, p. 199) reports a post-Arusha "proliferation" of bodies concerned by adult education, with the number listed in the Institute of Adult Education's Directory rising from 24 in 1966 to 46 in 1973. According to the second Plan (1969, Vol. I, p. 157) "The characteristic feature of adult education is that various organizations participate. Among them are TANU, UWT [Union of Women in Tanzania], the co-operative movement and the Churches." A number of Government agencies whose primary function is not educational have provided strong support for non-formal programs. These include the Army, Radio Tanzania (which Hall and Mhaiki (1972, p. 30) report as having a special adult education section) and particularly the Tanzania Library Service. Of crucial importance in creating a literacy environment in areas with severe communications and logistics problems, the Library Service has displayed considerable ingenuity and getting books to new (and other) rural literates. According to Hall (1975, p. 17), this effort has taken four forms: a book box system, distribution of books through the 65 District Adult Education Officers, a mobile library program and a recently launched and ambitious scheme to distribute reading material by servicing each of the country's 1,800 wards. It is important to note the realism of the Service's approach, which does not limit itself to provision of books. Viscusi (1971, p. 34) reports the experimental literacy project librarian's view that "it is not enough to ensure that a supply of books reaches new literates. Equally important is getting the new literates to use these books."

Among non-governmental auxiliary agencies in the non-formal sphere (Hall, 1975, Annex III) are a number of local bodies (often religious, such as the Dar es Salaam Baptist Community Center and the Imbe Parish at Moshi) as well as national organizations surviving from colonial times and generally having strong international ties (Boy Scouts, Girl Guides, Red Cross, YMCA, YWCA and the Christian Council of Tanzania). Of wider and probably more intensive impact are the newer mass and vanguard movements linked closely to the ideology of self-reliant socialism. The trade union (National Union of Tanganyika Workers--NUTA) has a fundamental role in stimulating the full application of the above-mentioned measures regarding provision of education in enterprises. The women's organization (Union of Women of Tanzania--UWT) has responsibility for encouraging women throughout the country to join adult education and other non-formal programs, and (Hall and Mhaiki, 1972, p. 13) itself organizes courses in handicrafts, housework, and cooperative management, among other subjects. The parents' body (Tanganyika African Parents Association--TAPA) works to introduce adult education into conventional primary schools, organizes literacy classes and stimulates such related activities as the construction of shelters for literacy work where no buildings exist (Hall and Mhaiki, 1972, p. 23). In more general terms, TANU serves as the vanguard and basic driving force behind the educational (and other) activities of these mass organizations, which are its specialized affiliates. The effective presence of TANU and its affiliates in enterprises, neighborhoods and villages throughout Tanzania is doubtless an important factor explaining the mass nature of audiences reached by certain non-formal programs.

In summary, Government has prime administrative responsibility for both formal education and non-formal programs, although the former is located in a single ministry while the latter are scattered through a number of ministries, with the share of non-educational ministries growing (sharply, in terms of capital expenditure). The national private sector has virtually no responsibility for non-formal education, and decreasing responsibility in primary schooling. Its influence is growing, however, at the secondary level, where it seems to offer the affluent a means of escaping the egalitarianism of the policy of education for self-reliance.

The only para-statal body heavily concerned with formal education is the University, whose calls for "autonomy" may in fact cloak a desire to remain privileged and aloof from the surrounding society (in imitation of the Western model of higher education). In contrast, a broad variety of para-statals have responsible roles in the non-formal sphere, some (e.g., enterprises and training programs) relating to the urban and "modern" sector of the economy, while at least one (the Institute of Adult Education) has played a crucial role in ensuring the provision of mass rural education compatible with the self-reliant policy.

Government technical services have important auxiliary functions in both the formal and non-formal spheres, and certain local groups or national non-governmental bodies, survivors from colonial times, have roles in non-formal programs. By far the most important auxiliary agencies in formal and non-formal areas are TANU and affiliated mass bodies, which formulate policy, catalyze policy implementation, take part in implementation (e.g., TAPA schools and UWT women's courses) and serve as a grass-roots link between the people and the Government.

Relationships Among Responsible Authorities

Of equal importance with the distribution of responsibility for education among different bodies are the ways in which the responsible bodies relate to each other. How have the nature and evolution of these relationships expressed themselves in horizontal cooperation and coordination? In decentralization? In the trend toward self-government in educational institutions?

In the area of formal education coordination and cooperation among different administrative bodies with prime responsibility for one aspect or another of schooling do not seem to pose problems of a greater intensity than in other countries. This is probably due partly to the cohesive effect of TANU's political leadership, but equally (or more) to the fact that formal education is administered by a single ministry. The second Plan (1969, Vol. I, p. 24) foresaw that the integration of primary and secondary education with rural development that would result from the application of the policy of education for self-reliance would necessitate "the collaboration of other ministries and agencies." But these bodies have only a single partner, with overall responsibility.

The same is true of the control exercised by the Ministry of

Economic Affairs and Development Planning to ensure congruence between secondary and university graduates and manpower estimates, and of the interministerial committees whose creation, Sochor reports (1970, p. 1), was "to ensure that pupils completing secondary school are channeled toward productive and essential work." In all these instances, external bodies have but one vis-à-vis.

The situation is much more complex in the non-formal sphere, where so many bodies of different kinds and working at different levels have prime responsibility for educational programs. Available information is rife with examples of non-formal programs' attempts to come to grips with the problem of cooperation and coordination. That they are succeeding in some way or another is suggested by the fact that, among the adult educators studied by Kassam (1973, pp. xiv-xv), 85% reported they "planned and coordinated their programmes in cooperation with other agencies and institutions." One solution has been informal cooperation. Hall and Mhaiki (1972, p. 26) noted that:

> Many bodies have established, among themselves, relations that have never been made official. Two organizations work together not because the administration planned it so, but because they deal with the same subject.

On a more official plane, cooperation has been achieved around short-term efforts, such as the radio education campaigns. Thus a coordinating committee comprising representatives of the Institute of Adult Education, the University, the Ministries of Health and Education, TANU and the Prime Minister's Office played an important part in the 1973 health education effort ("Large-Scale Multi-Media Health Education Campaign in Tanzania," 1973, p. 1). But even short-term cooperation has been far from problem free. Hall and Mhaiki (1972, pp. 38-39) report that an effort to "avoid duplication of competences" by ensuring coordination among agencies concerned by the Time of Rejoicing campaign ran into "the old problem of finding the best way to combine maximum participation in decision-making with maximum efficiency in implementation."

In one rather limited field of action, cooperation does appear to have been successful. According to the Lewis team (1971, p. 6.13), the National Industrial Training Program established a National Industrial Training Council "to keep the course closely tied to industry and employer's needs [by securing] advice on curricula, syllabuses and general policy." In another, also sectoral area, coordination also seems to be working smoothly. Grabe (1972, p. 1) notes that the system of cooperative education is "managed jointly by the National Government . . . and the cooperative movement [and so] constitutes a comprehensive approach to the total training requirements" of cooperatives.

In other instances, however, cooperation and coordination have proved considerably more difficult. One solution (although in the event the logic of rationalization may have been the over-riding consideration) has been to amalgamate existing disparate institutions into a single new body, as when various ministries' facilities were combined (in May 1970) into the Rural Training Centers, under the Ministry of Regional Administration and Rural Development. (According to Odia (1971, p. 24) other ministries are "still responsible for training within each Center in their respective fields. . . .")

Literacy, too, has been plagued with problems of coordination. Originally launched under the Ministry of Regional Administration and Rural Development, the experimental literacy project was shifted two years later (in 1970) to the Ministry of National Education with initial results that Viscusi (1971, p. 24, emphasis added) describes as "disastrous. . . . Project activities suffered badly [although] in the end, the crisis was more or less contained." By 1973, a National Coordination Committee for the National Literacy Campaign had been set up ("Functional Literacy Curriculum, Programmes and Materials Development," 1973, p. 5) under the Chairmanship of the Ministry of National Education and with the participation of no less than ten other governmental, parastatal and non-governmental agencies. How well this body, which has broad advisory powers relating to policy, curricula, materials, training, etc., has functioned is not clear from available documentation.

What is obvious, on the other hand, is the lack of any overall means of cooperation in the sphere of non-formal education as a whole. The second Plan (1969, Vol. I, p. 157) points to the diversity of bodies concerned here and stresses the need to ensure coordination. Yet the Lewis team (1971, p. 5.11)

> . . . found only limited evidence of collaboration between those administering [non-formal programs, and particularly adult education] in the Ministry of National Education and those administering a host of other programs in other ministries and agencies.

Similarly lacking, with one exception, is any machinery at all to ensure administrative coordination and cooperation between the formal and non-formal spheres. The exception refers to Community Education Centers, since these are the locale of an organic co-existence of formal primary and non-formal learning. In this respect, the second Plan (1969, Vol. I, p. 157) says that in the CEC

> . . . the provision of primary education is only one function. A school so conceived will increasingly become a focal point for

> the total educational needs of the community, rather than serving as a somewhat detached institution for the education of children.

Accordingly, London reports (1973, p. 440) the

> . . . creation of an Administrative Board in the Ministry of National Education, designed to administer a national program of adult education thanks to the transformation of primary instruction into a program of community schools [the CEC's] serving both children and adults.

A major development in the sphere of formal education administration since 1967 has been the policy of decentralization of responsibility for primary education (secondary, teacher training and higher education remain centralized) to the regional level, with main responsibility being handed to each of the 17 regions. The effect of this policy may be somewhat mitigated by the retention at the center of the power to approve regional plans on a year-to-year basis. On the other hand, official figures quoted in Preliminary Education Projects for the Third Plan (1974, Annexes 33, 35) show a marked and intensifying trend for monies earmarked for primary education to devolve to regional control. Such was the case of over 90% of estimated recurrent expenditure for 1973/74, for example.

Moreover, decentralization is beginning to reach down from the regions to the local level, albeit on an experimental basis. Kinunda (Experience in Tanzania . . ., 1974, pp. 19-25) reports success in an experiment in local assumption of responsibility for primary education in the Kwamsis Ujamaa Village, near Korogwe. Curriculum reform and school administration (and integration into village life) have been ensured by the participation of parents, villagers, teachers and the pupils themselves. Kinunda notes that "more primary schools all over the country" are all set to follow the Kwamsisi pilot project's approach.

Decentralization of non-formal education has not been so spectacular as that occurring in primary education, probably for two reasons. First, decentralization of responsibility for primary schooling (with its attendant possible "violations" of sacrosanct national norms) is a more surprising novelty than in non-formal education, one of whose characteristics is precisely adaptation to local conditions and needs. Secondly, it appears (from official figures quoted in Preliminary Education Projects for the Third Plan, 1974, Annexes 33, 35) that the shift of financial resources has not been so radical in the non-formal area as in primary education. Of funds budgeted for adult education by the Ministry of National Education for 1973-1974, for example, the center retained exactly two thirds of recurrent expenditure and all capital investment. If moreover, the Second Vice-President's Office has made provision for devolution of funds to the regions (chiefly for Rural Training Centers), most of its educational budget is spent by the center; and no other non-educational ministry appears to have made specific provision for regionalization of funds.

Nevertheless, the decentralization of non-formal education is a notable feature of educational administration today. The Ministry of National Education's network of field staff reaches down to the ward level, with 1,800 Ward Coordinators of adult education reported by Hall (1975, Annex 1). Symbolically, the headquarters of the National Literacy Campaign was established, not in the national capital but in the regional town of Mwanza.

The cooperative education programs also work partly in decentralized fashion, with 13 coop education wings, each serving about 125 cooperative societies reported by Grabe (1972, p. 78). The meaning of this decentralization is a real shift of power, as typified by Grabe's view of the coop education wings. They are considered a temporary measure "during a difficult period of transition before the unions and societies can pick up the functions of education and training management." To some extent, at least, the process has been successful. Thus, local cooperative unions have appointed educational secretaries with organizational responsibilities. In this connection, it may also be noted that--although residential--Rural Training Centers depend on the assumption by villages served of certain responsibilities, in particular (Lewis (ed.) et al., 1971, p. 5.12) the collective nomination of course attenders and the provision of a framework for use of knowledge acquired at RTC's on learners' return to their villages.

The final stage of decentralization--the devolution of a goodly degree of self-government to educational institutions and programs--is now appearing in Tanzania. In the formal sphere, it seems to be widespread at the primary level. The Lewis group (1971, p. 4.3) report that

> Reforms in primary education extend beyond revision of content. An effort is being made to have schools function as communities and at the same time to be an integral part of the larger community.

If correct, Hatch's lengthy dramatization of the meeting of an imaginary school committee (1973) suggests that local educational committees enjoy considerable latitude in determining curriculum for primary schools in ujamaa villages at least[4] although pupils and youth are not depicted as having a say. On the other hand, President Nyerere is quoted ("Nyerere," 1970, p. 5) as saying

---

[4] In Ishumi's random 1972/73 sample, of 140 schools in Bagamoyo,

> The children own and run [the school farms]. They decide what crops to plant, when, where, and how, what fertilizers to use, what proportions of the crop they wish to sell, etc., etc.

The already-mentioned experiment in Kwamsisi Ujamaa Village supports the view that primary pupils are involved in organizing at least certain aspects of their education, although they are probably accorded more leeway in the kinds of activities that take place outside the classroom, referred to by President Nyerere. Kinunda does say that pupils were consulted on curriculum reform and school administration, but stresses their role in decision-making outside the school proper. Thus one of the three main reasons to which he attributed (Experience in Tanzania. . . ., 1974, p. 22) the success of the Kwamsisi experiment is that:

> The participation of pupils in the planning, implementation and management of their self-help activities is helping to destroy the traditional, authoritarian set-up. In its place there develops a learning process which is based on experience and trust.

At the post-primary level, the idea that educational institutions should function with a degree of self-government also seems generally accepted. Hatch (1973, p. 72) attributes the devolution to students of "a great deal of control over how they live and study" to the fact that "secondary schools are generally residential." The Lewis group (1971, p. 4.10) say, similarly, that the concept of ujamaa is "given reality [in training of primary teachers] since the national colleges of education function as communities." As at the primary level, however, self-govern-

---

Arusha and Masai districts, not a single school was found to have formulated its syllabus "substantially or partially" with representatives of the community (1974, p. 245).

ment seems largely confined to decisions not affecting the contents, methods and organization of actual classroom work. Students are said, for example, to "organize themselves for productive activity in growing food and maintaining their buildings."

To conclude with regard to formal education, it seems that, along two dimensions, the issue of balance in self-government has not been fully resolved. First is the need to achieve balance between the concerns of the student body and those of the surrounding community. This may be happening in the primary schools, which--being non-residential--are more susceptible to integration with the village: the school is both a community itself and may tend to be integrated into the larger village community.[5] In the case of residential institutions such as secondary and teacher-training establishments, self-government runs the risk of functioning *in vacuo*. While perhaps expressing the concerns of the students, it does not necessarily ensure that these mesh with the needs and aspirations of the community--or nation. Indeed, as was pointed out above with regard to the problems of autonomy and student participation at the University, self-government in residential institutions may even express non- or counter-revolutionary currents.

Secondly, it may be asked to what extent self-government at all levels of formal education reflects and reinforces the dichotomy (analyzed in Chapter IV above) between the still-academic classroom side of schooling, on one hand, and more innovative other aspects. From available evidence, it appears that the academic side (far from fully renovated in the light of self-reliant precepts) is less subject to self-government than the other aspects (which seem to be viewed as privileged areas of application for self-reliance). Concretely, students may have, in Hatch's just-quoted phrase, "a great deal of control" over productive activities, building maintenance, etc. (where--as the Lewis group said--ujamaa "is given reality"), but examination-oriented curriculum and pedagogy seem to escape their purview.

---

[5] This tendency may be limited to *ujamaa* villages, or experiments such as that referred to by Kinunda and quoted above. Ishumi's random sample of 140 schools (also referred to above) led him to conclude (1974, p. 253) that in general there was no "conscious, purposive or functional interaction" between school and community "in spite of [their] close proximity.

Since 1967, self-government has come to play an important role in the non-formal sphere, particularly as regards non-residential mass-oriented programs. (Information on governance of such schemes as the Rural Training Centers and Ministry of Agriculture Training Institutes is not readily available.) The second Plan (1969, Vol. I, pp. 157-158) stipulated that "the general responsibility [for village-level adult education activities] will rest with the headmaster" of the primary school, although it did foresee that here, as elsewhere, the approach would build "on experience as it is accumulated."

Accumulated experience seems to have allowed the rapid introduction of comprehensive self-government. The Lewis team reported (1971, p. 5.9) that "decisions on what type of courses should be offered are supposed to be made at the village level by adult learners," and Hall (The United Republic . . ., 1974, pp. 513-514) indicates that this principle is being applied in village-level adult courses (presumably in the framework of the Community Education Centers):

> The learners themselves are involved in the organization of the classes. . . . The group leader who initiates and guides

> the discussion is usually selected by the group itself [for crash training at the Ward level]. . . . Each class has its small committee from among its pupils who plan the courses, supervise attendance and the smooth running. . . . These are important elements for the success of the programmes, because they involve the people themselves and make them committed to their own program.

A similar situation has held true in the organization of literacy since the inception of the experimental project in 1968. Viscusi (1971, p. 24) stresses that

> Adult literacy in Tanzania is not a service offered by some remote ministry through the good offices of civil servants who descend on the community from afar; it is a benefit that people are meant to go about getting for themselves. . . . As they do so, they are learning techniques of community organization that they can apply to solving other problems facing the community.

The initial organization of classes was carried out by a village-level center committee composed of what Viscusi (1971, p. 23) calls "influential persons" according to the idea that "once you [i.e., civil servants] have convinced the real leaders of a community, you will get the cooperation of almost everybody else." Initiative was not, however, limited to village leaders. In addition to such "influential persons" as "the local TANU leader and an active local priest or pastor," membership in the organizational center committees was open to prospective class participants since "literacy [was] not a criterion for membership." Still more important, once classes were organized, a considerable degree of responsibility shifted from center committees to class committees, elected by participants.

Consisting of a chairman, secretary and treasurer, as well as the teacher (presumably ex officio), class committees make (according to Viscusi, 1971, p. 24) "all decisions about [the class's] future." These include: "how to spend any money that may be realised from the demonstration plot or how to enforce discipline among participants." In addition, the class committees decide "how long classes should continue" and in practice "classes often modify [their] schedule." Significantly, class committees may take certain decisions increasing the amount of money spent by the Government. Thus, teachers of classes that decide to extend their overall life span must be "paid for any extra months of teaching." If, then, literacy classes seem to have rather less say than the above-mentioned village-level adult education courses in selecting what they are taught (decisions are taken by the Campaign in line with overall curriculum orientation), they seem to have virtually complete control over how it is taught.

The same may be said of the radio education campaigns. The 1971 Time of Rejoicing program listening groups are reported by Hall and Mhaiki (1972, p. 41) to have elected a chairman and secretary, and to have undertaken such other "practical tasks" as determining their own place of meeting. Cooperative correspondence study groups at the village level are also self-managing. According to Grabe (1972, p. 70)

> The study group provides perhaps the first opportunity for active members in the societies to experience the practical use and application of democratic principles and procedures.

Regarding the issues of balance, these non-residential mass-oriented programs are, in the first place, clearly integrated with the local community both structually (e.g., the complementarity of the center committees and class committees in the Literacy Campaign) and because they are the self-managing expression of the communities' desire for initial or continuing education. Secondly, although (with the important exception of village-level adult education courses) learners in these non-formal programs have little direct say concerning what is taught, they have considerable control over how they shall learn.

In summary, horizontal cooperation among various bodies concerned with formal education is considerably facilitated by the fact that overall authority is vested in a single ministry. In the non-formal sphere, where many ministries and bodies are responsible, there is no global horizontal cooperation, although fairly broad cooperation has been achieved for short-term programs (e.g., the radio education campaigns) and narrower sectoral cooperation has existed with regard to certain longer-term efforts (e.g., the National Industrial Training Program). Although no overall cooperation exists between responsible bodies in the formal and non-formal spheres, organic administrative co-existence exists between primary schooling and certain non-formal programs in the framework of the Community Education Center.

Primary education has undergone a radical decentralization process to the regional level, and experimentation has been successfully carried out in further decentralizing to the local level. Responsibility for post-primary formal instruction remains centralized. Although certain non-formal programs remain subject to centralized authority, responsibilities for others have been decentralized to the regional level (including the Second Vice-President's Office's Rural Training Centers, and the Ministry of National Education Programs, authority for which is also exercised at the Ward level) or in other ways (e.g., the transition of responsibility for cooperative education to wings and, ultimately, unions and societies).

Primary schools function as self-governing communities, but although self-government is achieved in integration with community concerns, it does not appear to affect the curriculum or organization of classroom learning, being largely confined to non-academic activities (e.g., productive work and school maintenance). The same holds true for post-primary formal education, except that--being residential--it may be farther from community concerns; at the University, for this reason, self-government seems not fully compatible with the implementation of _ujamaa_ socialism. In the non-formal area, self-government seems widespread among non-residential and mass-oriented schemes, where it is integrated with community concerns and is a means of considerable control over the organization of all aspects of learning as well as over curriculum choice in one case at least (village-level adult education at the Community Education Centers).

Conclusions

A first conclusion one may draw from this chapter is that _with regard to the organization of education in Tanzania there are clear and important similarities between the formal and non-formal spheres_, the most salient being: the late start and problematic nature of evaluation; the chief responsibility of Government for both spheres; the crucial importance of TANU and its affiliates; the auxiliary roles of certain Government agencies; the organic co-existence of formal (primary) and non-formal education in the Community Education Center; the decentralization of formal (primary) schooling and certain major non-formal programs;

and the widespread notion and practice of at least partial self-government in educational institutions.

Secondly, however, there are sharp organizational differences between formal instruction and non-formal programs. These include: the opposition between the long-term and global nature, and post-primary high-level manpower focus, of formal education, on one hand, and the short-term and fragmented programming approach, on the other hand, of non-formal programs with a rural, non-"modern" and socialist focus; the increasing role of private secondary schooling compared with the absence of private interests in the non-formal area; the non- or counter-revolutionary role of the University contrasted with the vitally revolutionary role of the Institute of Adult Education, in the para-statal sector; the problem-free nature of horizontal coordination of formal education thanks to the predominance of a single ministry contrasted with the fragmentation and lack of global coordination in the non-formal sphere; the centralization of formal (post-primary) responsibility compared with the decentralization of major non-formal programs; and the partial character of self-government of formal institutions (particularly post-primary) as against the broader responsibilities for self-government in non-residential mass-oriented non-formal programs.

Thirdly, there once again emerge special affinities between non-formal programs (particularly those that are non-residential and biased toward a rural non-"modern" audience) and the primary school. Most worthy of mention are: the decreasing or non-existent role of private interests; the organic co-existence in the Community Education Center; the decentralization of responsibility; and the context if not extent of self-government (with primary schooling and non-formal programs integrated into community concerns, although primary school self-government has little if any affect on the organization of learning, unlike certain non-formal programs).

In terms of opposing models of development, *it appears that major organizational features of post-primary formal education relate closely to the concerns of the urban-oriented "modern" sector of the economy and stratum of the population* (preoccupation with high-level manpower and a non- or counter-revolutionary University, combined with a *de facto* derogation allowing private secondary education to offer the affluent an escape from the egalitarian nature of the stress on expanding primary schooling) *while non-formal programs tend to have a rural, non-"modern" bias*.

Given the antithesis between the two notions of development served by formal and non-formal education (respectively: Western-type "modernization" and self-reliant socialism), and the fact that self-reliant socialism has been explicitly espoused as the ideology of Tanzania thus putting the partisans of Western-style development on the defensive, it seems logical to hypothesize that *formal education should be endowed with an authoritarian apparatus liable to enhance its chances of survival in the current rear-guard struggle against forms of education* (primary and non-formal) *that correspond more closely to the new ideology*. This seems to be so, since chief organizational characteristics of post-primary formal education are: global long-term planning, single-ministry responsibility, centralized administration and limited self-government (primary schooling only fully affected by the first and second).

Conversely, given its new and still experimental and evolving nature, in addition to the geographical diversity of its audiences and the need to offer them learning opportunities in a broad variety of disciplines, primary and particularly non-formal education is much less likely to have a strong apparatus. This assumption also seems borne out by the facts; non-formal programs tend to be programmed separately rather than planned globally, to make use of many and diverse governmental para-statal and auxiliary bodies, to be un-coordinated and decentralized, and to allow and encourage considerable learner participation in self-government (primary schooling sharing to some extent the third and fourth characteristics).

On the whole, then, non-formal education and (to some extent) primary schooling--which are most closely linked with education for self-reliance--seem organizationally weaker than post-primary formal education--which is allied with the struggle for survival of the Western-style approach to development. It would be a typically technocratic error to view the current struggle between the two notions of development, and their corresponding forms of education, in narrowly organizational terms, however. In the medium term, it will be less the kinds and articulations of education (and other) structures that will determine the outcome of the struggle for socialism in Tanzania than what is done with those structures and by whom. This raises in particular the issue of TANU's ultimate role. Will it be a spokesman for the rural non-"modern" majority and their vehicle for implementing self-reliant socialism? Or will it be tamed by the urban "modern" elite and manipulated by it in an attempt to achieve Western-style development?

CHAPTER VIII

FOREIGN INFLUENCES ON EDUCATION

Given the alien origin and generally alienating function of Western-style education in Tanzania, and the frontal assault on that education made by the policy of self-reliance, the continuing presence of foreign influences on Tanzanian education is a particularly important yet thorny subject. Such influences express themselves most concretely through programs of aid.

The real helpfulness of much aid is dubious. For one thing, transfers of funds, equipment and manpower from industrialized to Third World countries may in fact be interpreted as *re*-transfers of only a part of the wealth taken by the industrialized countries from the Third World, in the context of increasingly unfavorable terms of trade. In the case of Tanzania, the Principal Secretary of the Ministry of Finance observed in 1970 that during the first Five-Year Plan period "losses from sisal price declines have more than equalled total gross aid receipts over 1964-1969" (quoted in Rodney, 1973, p. 8).

Secondly, aid is not always aid because it is seldom disinterested. On the whole it tends to serve the economic and/or geo-political interests of the donors, even when it is multilateral and supposedly more neutral than bilateral. According to Rodney (1973, p. 7) assistance from "the World Bank was no less tied than that from individual capitalist countries, in the sense that it directed the economy along lines of private enterprise." It appears that this practice continues. According to Hatch (1975, p. 14), in October 1974

> . . . the World Bank told President Nyerere that he would have to modify his socialist policies as the price of his country's economic survival. It virtually threatened to withdraw current and future aid unless he suspended his ujamaa programme. . . .

A rejoinder by the Bank's Vice-President for the Eastern Africa Region (Husain, 1975, p. 10) was unconvincing.

It is then from a necessarily prudent standpoint that the issues of foreign influences on--and particularly aid to--Tanzanian education since 1967 must be approached. These issues are: What are the chief sources and recipient sectors of aid? Do patterns appear among them? And what seem to be the major external influences on educational concepts and policies?

Sources and Recipients

Comprehensive and reliable data on the sources[1] and recipients of aid to education over the last few years are not readily available. Nevertheless, an idea of the general trends in this area may be had by comparing information reported by the Lewis group (1971, Appendix A; in certain instances it is unclear whether this information refers solely to the year reported on) and official figures quoted in Preliminary Education Projects for the Third Plan (1974, pp. 50-51, Annex 33) and--for United Nations Development Program expenditure--UNDP Assistance Requested by the United Republic of Tanzania for the Period 1972-1974 (1971, Annex I) and 1972 Annual Review of the Country Programme for UNDP Assistance (1972, pp. 7-9).

---

[1] Bilateral sources reported on here are public.

According to the Lewis team, the total of specified flows to education in Tanzania in 1971 was on the order of $19,076 million--the actual total including non-specified flows being somewhat higher. Of the specified total, bilateral sources (including the joint Scandinavian NORAD effort) were responsible for about four-fifths, with the UN system accounting for roughly one-fifth (not including the World Bank component). Although the United Kingdom and the People's Republic of China have been variously indicated as sources of aid to education previous to 1971 (Sochor, 1970, p. 13; and Grabe, 1972, p. 10), they do not figure among the eight donor countries listed by the Lewis group that year. This is not surprising in the case of the UK, given the strained relations between Tanzania and the former colonial power that resulted from diverging policies on the Zimbabwe (Rhodesia) question.

The bilateral donors listed include, in addition to NORAD (it is unclear whether Finland participated at that time), five members of the North Atlantic Treaty Alliance (Canada, Denmark, the Federal Republic of Germany, the Netherlands and Norway) and two nominal neutrals with strong economic and social links and similarities with the other industrialized capitalist nations that were actually signatories of the North Atlantic Alliance (Sweden and Switzerland). Among these donors, NORAD was by far the most important, with a specified contribution of $9,280 million, with Danish, Norwegian and Swedish outlays raising the total Scandinavian expenditure to some $14 million of a grand bilateral total of $15,676 million, or almost 90%.

Formal education took the lion's share--apparently over 90%--of all foreign aid to Tanzanian education reported by the Lewis group. In the formal sphere, higher education was far and away the main recipient, taking some $5,618 million, i.e., one-quarter of all foreign contributions or one-third of the bilateral contribution. Most of the specified flow to higher education came from bilateral sources, leading among which were Denmark, the Federal Republic of Germany and--most important--the NORAD group. Unesco was also involved in aid at this level. Although Denmark, the Netherlands and Switzerland provided considerable amounts to Colleges of National Education (a total of over $2.5 million), this served a variety of educational levels; the only specified contribution directed to the primary level per se was $400,000 grant by UNDP and Unicef for primary teacher upgrading, in which Unesco was also involved. UNDP and Unesco spent more than twice that to train secondary science teachers; indeed, secondary and technical education received most of the remainder of foreign aid to formal education, with Canada, the Federal Republic of Germany, Denmark, the Netherlands, NORAD, Norway and the UN (UNDP and ILO) being those chiefly involved.

In the non-formal sphere, the Federal Republic of Germany, the Netherlands, the NORAD group, Sweden and Switzerland were the main bilateral donors to individual projects such as the Cooperative Education College and Center, two Ministry of Agriculture Training Institutes and the Women's Education Center at Dodoma. Perhaps more important here was the role of multilateral flows, particularly the contribution of UNDP and Unesco to the Experimental Literacy Project reported to be $1.2 million, although this figure was for the five-year life of the whole Project.

In 1971, then, Tanzania appears to have been heavily dependent in quantitative terms on external aid for education. The specified foreign contribution of $19 million was the equivalent of one-third of total national Government expenditure on education (all ministries, capital and recurrent: $57.3 million; *Preliminary Education Project: for the Third Plan*, Annexes 33, 35). It has accounted for the equivalent of nearly one-quarter of all educational resources. Bilateral flows including NORAD outstripped multilateral contributions by a 5:1 ratio, and were essentially Western and capitalist, although they included two nominal neutrals. Major imperialist nations were absent, however, with the exception of a relatively small contribution from the German Federal Republic. Public bilateral aid came, rather, from overwhelmingly Scandinavian sources.

Formal education seems to have taken over 90% of all aid, with higher education receiving a third of all bilateral flows. Teacher training, and secondary and vocational education were also stressed, with primary education receiving directly only a relatively small part. There are no clear correlations between types of donors and types of recipients, although multilateral aid (particularly UNDP/Unesco) took a direct interest in primary education, while bilateral aid did not. Multilateral aid seems to have had a role in the non-formal sphere whose importance probably at least equalled that of bilateral donors (despite the overall 5:1 bilateral:multilateral ratio).

By 1973-74, this situation had undergone certain changes. That year[2] total reported flows were on the order of $13,516 million, *including* World Bank loans (not included under the 1971 figure). This is equivalent to about 11 per cent of total Government expenditure ($94.8 million; *Preliminary Education Projects for the Third Plan*, Annexes 33, 35), or roughly one-tenth of all educational resources. Of total aid, bilateral sources--again including joint Scandinavian efforts--for some $10,691 million, i.e., about four-fifths of all aid. Scandinavian sources accounted for about $5,770 million.

The list of bilateral donors included six Western capitalist nations that are members of NATO (Canada, Denmark, the Federal Republic of Germany, the Netherlands, Norway and the USA), one nominal neutral with strong economic and social links and similarities with NATO nations (Sweden), one neutral with such links but also a strongly non-aligned foreign policy (Finland), and one Eastern socialist country with membership in the Warsaw Pact (Hungary). Scandinavian countries, with a total of about $6,610 million, accounted for nearly two-thirds of all bilateral aid.

Non-formal programs and projects of various kinds received upwards of 61% of bilateral aid disbursed (contributed by all countries mentioned but the Federal Republic of Germany), and accounted for 15 of a total of 26 bilaterally aided educational efforts, to which may be added the 1973 radio health education campaign, which was financed almost in its entirety by Swedish public aid according to figures given in Mtu ni Afya--An Evaluation (1974, p. 174). Among the non-formal efforts aided by bilateral sources, five may be deemed to correspond closely to the rural, non-"modern" model of self-reliant development. These include, in addition to the radio education campaign, the Cooperative College, a Ministry of Agriculture Training Institute at Mlingano, the National Correspondence Institute, and the Ministry of Health's scheme for training rural medical aides. These received about one-fifth of bilateral aid accorded to non-formal projects, or roughly 12% of all bilateral aid. The other 80% of bilateral aid going to non-formal education, was accorded to programs with closer links to the urban, "modern" notion of development, including the Institute of Development Management, agro-mechanics training, the University's Forestry Department, etc.

---

[2] Presumably fiscal year for the bilateral contributions and World Bank loans reported in *Preliminary Education Projects for the Third Plan*. UNDP aid has been calculated by averaging the respective 1973 and 1974 figures reported by *1972 Annual Review of the Country Programme for UNDP Assistance* for those years, and adding the special additional UNDP contribution to literacy announced in *Large-Scale Project Approved for the Government of the United Republic of Tanzania* (1974, p. 2).

Of the 39% of total bilateral aid going to formal education (Hungary, Canada and the USA did not contribute to this sector), 32% or about 12% of all bilateral aid went to experimental or innovative efforts more or less clearly in line with the implementation of the policy of education for self-reliance. These included (for a total of three of the 11 formal education projects or programs aided bilaterally): the Kibaha Education Center, new secondary school construction, and the construction of agricultural units for existing secondary schools. Of the remainder, the most important single beneficiary was higher education, which took $2 million, i.e., almost half of bilateral aid to formal education, or nearly one-fifth of all bilateral aid.

Correlations appear to exist between different categories of bilateral donors and different kinds of non-formal and formal education aided. Thus, sources for aid to formal education projects most closely aligned with education for self-reliance included exclusively Scandinavian countries: Denmark, Finland, Norway and Sweden, that is, a group including two NATO members and two neutrals. Aid to non-formal programs and projects most in line with rural, non-"modern" and self-reliant development came from Finland, Hungary and Sweden, that is, a group including no NATO member, two neutrals and a socialist country.

Turning to multilateral aid, which accounted for about one-fifth of all external help in 1973/1974, the major contributions of the UN system were made by the World Bank (some $1,654 million, according to official figures quoted in Preliminary Projects for the Third Plan, 1974, p. 51) and the UNDP (about $1,171 million according to estimates reported in 1972 Annual Review . . ., 1972, pp. 7-9, and the special addition allocation for literacy, cf. Large-Scale Project Approved . . ., 1974, p. 2).

World Bank loans covered six projects, four sponsored by the Ministry of National Education and one each by the Ministries of Agriculture and Labor. Of these it would appear that the Ministry of Agriculture project, which accounts for more than two-fifths of total Bank credit extended, relates particularly to various forms of training ujamaa village personnel, and may thus be said to correspond more than less to the policy of self-reliant education. In addition, the secondary education project (consuming about a quarter of the Bank's total loan) was largely concerned with providing practical facilities such as workshops, while the teacher training project appears, despite its title, to have focused in some measure on the construction of Community Education Centers, offering both formal (primary) and non-formal educational opportunities. (Cf. "Tanzania's Massive Education Program Given World Bank Aid," 1973, p. 7.) This project absorbed only about two per cent of Bank funds. All these projects may tentatively be said to serve rather than inhibit the implementation of the policy of education for self-reliance.

On the other hand, aid to the University's Faculty of Medicine, to the Dar es Salaam Technical College (in cooperation with Dutch bilateral assistance), and to the Ministry of Labor's Vocational Training Program--projects accounting for about a third of all Bank loans--seems to lean more toward the urban-oriented "modernization" approach to development. By and large then, and although it is impossible to identify any direct influence of the 1971 mission carried out for the Bank by the Lewis team (which was very sympathetic to the self-reliance policy), the greater part of World Bank soft loans seem, at very least, not to contradict the policy of self-reliance and, in the case of the Ministry of Agriculture project, to encourage non-formal education's role in the policy's implementation.[3]

UNDP aid to human resource development in 1973/1974, most of which was directed to education (with most educational projects being implemented by Unesco as executing agency), was roughly divided in such a way that one-third went to non-formal programs, one-third to formal education, and the remaining third to such human resource-related institutions as the social security authority and (especially) the National Institute for Productivity. Among formal educational efforts aided, higher education led the way, taking nearly one-fifth of all UNDP aid, while primary teacher training--the only formal effort closely related to education for self-reliance--lagged badly, receiving less than one per cent of UNDP's total contribution. On the non-formal side, the National Vocational Training Program received over ten per cent of total UNDP aid, while literacy took over 20%.

---

[3] This would seem to contradict the Bank's apparently adamant opposition to other Tanzanian socialist policies. Or is it a case of the Bank keeping its "eggs" in several "baskets"--among which education is relatively unimportant?

Keeping in mind the very approximate and incomplete nature of the figures just quoted, trends regarding sources and recipients of external aid to Tanzanian education may be summarized as follows. Generally, the country seems to have become less dependent on external aid in quantitative terms; 1971 aid was equivalent to nearly one-quarter of all educational resources[4] while, in 1973/1974, assistance accounted for roughly one-tenth of resources. Although bilateral:multilateral ratios of amounts of aid remained practically unchanged (5:1 in 1971 and 4:1 in 1973-1974--a difference easily accounted for by the absence of World Bank assistance in the 1971 calculation,[5] the geo-political character of the aggregate group of major bilateral donors changed. Although remaining strongly influenced by Western capitalist members of NATO, and adding the USA, it exchanged a nominal neutral (Switzerland) for a strongly non-aligned country (Finland), and added a socialist member of the Warsaw Pact (Hungary). Scandinavia remained a dominant force, although its contributions decreased in relative terms from nearly 90% to between one-half and two-thirds of total bilateral aid.

---

[4] This aid included certain figures relating to more than one year (e.g., UNDP-Unesco help for literacy) but did not take into account (a) non-specified aid, or (b) such an important source of loans for educational purposes as the World Bank.

[5] International Cooperation in Education (1974, p. 65) indicates a rough 5:1 average ratio of bilateral (OECD Development Assistance Committee countries only) to multilateral aid over the period 1969 to 1972, inclusive.

Perhaps the most striking change was the increase in non-formal education's share. From less than ten per cent of all aid, it came to receive over 60% of bilateral aid, about half of World Bank loans (particularly to Ministry of Agriculture and Ministry of Labor programs), and roughly one-third of UNDP assistance.

Within recipient categories, one finds that by 1973/1974 one-fifth of bilateral aid awarded to non-formal projects--or about 12% of all bilateral aid--went to programs identified with the rural, non-"modern" model of self-reliant development. Almost all World Bank loans for non-formal education--and about two-fifths of its total loans--seem to have gone to such efforts (the Ministry of Agriculture Project). Two-thirds of UNDP aid to non-formal education went to a similar program (literacy), help that accounted for about one-third of UNDP help to education, or roughly one-fifth of its assistance to human resource development. Regarding formal education, 32% of bilateral aid to this sector--or 12% of all bilateral aid--went to projects compatible with education for self-reliance. Such formal projects benefited from about one-quarter of all World Bank aid, but only received an apparently tiny portion of UNDP assistance.

Of bilateral aid to formal programs and institutions that appear more closely allied with the urban-oriented "modernizing" notion of development, higher education appeared as a priority, taking nearly half of bilateral aid to formal education or nearly one-fifth of bilateral aid. (This was, however, a decrease from the situation in 1971, when higher education took one-third of the bilateral contribution.) Higher education also enjoyed a continuing privileged position in multilateral aid, receiving about one-third of all Bank credits and nearly one-third of UNDP aid to education.

Non-formal programs not directly serving the rural, non-"modern" sector, or with close links to the urban and "modern" notion of development, accounted for about 80% of bilateral aid to non-formal education, or roughly one-half of all bilateral aid. One such program (the Ministry of Labor's Vocational Training Program) received only between three and four per cent of Bank loans to non-formal education, i.e., one to two per cent of all Bank credit. The same program--the only one of this kind aided by UNDP--received one-third of UNDP's allocation to the non-formal sector, i.e., one-sixth of UNDP aid to education or one-ninth of all UNDP help to human resource development.

Correlations may be established between types of donors and recipients. Formal programs not necessarily conducive to education for self-reliance tend to be aided chiefly by Western capitalist countries that are members of NATO, and by multilateral sources (World Bank and UNDP); this is particularly, though not exclusively, so in the field of higher education. Formal programs that seem more compatible with the policy of self-reliance (practically-oriented secondary facilities, Community Education Centers, the National Correspondence Institute, etc.)

receive bilateral help exclusively from the four Scandinavian countries--two NATO members) one nominal neutral and one strongly non-aligned--and multilateral sources (World Bank and UNDP).

Non-formal programs not particularly conducive to the implementation of education for self-reliance (agro-mechanic training, vocational training, range management, Forestry School, etc., receive help from bilateral sources that include NATO countries as well as a nominal neutral (Sweden) and both major multilateral agencies. Aid to non-formal programs most closely in line with rural, non-"modern" and self-reliant development (MATI's, literacy, etc.) comes from a bilateral group made up exclusively of non-NATO countries (Finland, Hungary and Sweden) and from both major bilateral agencies.

Influences on Concepts and Policy

The promulgation in 1967 of the declaration on *Education for Self-Reliance* seems to have raised a number of questions in the minds of non-Tanzanian specialists about the future of international aid to educational policy-making in the country. As in most other African countries, Tanzania during the Western period of its education (1961-1967--cf. Chapter I of the present work), gave foreign experts a rather free hand in influencing policy-making. Indeed, as pointed out in the section on planning and evaluation in Chapter VII, advisers from a variety of foreign bodies (the London Institute of Race Relations, Ford Foundation and Unesco) played a decisive role in shaping educational policy according to what I have termed a technocratic and anti-democratic orientation that the self-reliant policy has since been endeavoring to reverse.

With the 1967 declaration, it could be asked whether Tanzania would reject outright further foreign advice in the formulation of educational policy. It seemed for a time that the answer might be positive. This seemed the more likely since (although reflecting and transmitting a well-defined ideological approach to education) foreign aid claimed to be politically neutral and essentially technical in nature whereas the new policy gave primacy to ideological considerations.

The technical:ideological::foreign:Tanzanian cleavage was clearly expressed in the gingerly fashion in which the Dutch team of educational researchers sponsored by the Center for the Study of Education in Changing Societies (the end of whose two years' field work coincided with the Nyerere's declaration) approached the Government. The team found it (*Primary Education in Sukumaland (Tanzania): Summary Report*, 1969, pp. 5-7)

> . . . not surprising that, particularly in view of the President's message, [the educational authorities] were eager to know whether [our] findings might be of some help in the solution of their problems. . . . The conclusions of our study have of course been drawn independently. However, as far as the diagnosis is concerned there is a great consensus of opinion. To what extent our findings would support the President's policy directives is another question. We have tried as much as possible . . . not to engage ourselves in controversies, in which inevitably the political component is very strong and often decisive.

In the field of formal education, early steps to attain independence of foreign influences included the nationalization of the examination system, and the break effected from the tri-national University of East Africa to enable the creation in 1970 of the University of Dar es

Salaam, so as to ensure, in the words of Hatch (1973, p. 72), that "the education received at the highest level was in the interest of the country, and was not just developing academicians. . . ."

Despite such steps, it appears that the scope for foreign influence on formal education concepts and policy has not diminished appreciably. Unlike a small number of other Third World countries (e.g., China, Guinea-Conakry and--since its Liberation--Cambodia), Tanzania has not slowed or stopped the inflow of high level external advice regarding educational policy. In this connection, reference may be made for example to the mission carried out in March-April 1974 by a four-man Unesco-FAO team to advise on the formulation and identification of educational projects to be carried out during the third Five-Year Plan that might receive assistance from the World Bank and International Development Association.

But if the scope for external influence on formal education policy has not diminished, to what extent has such influence actually been exercised in ways compatible (or incompatible) with the self-reliance policy? There is little evidence in the literature on the basis of which to offer clear answers. The Unesco/Unicef project in primary education is a case in point. Berlin (1972, p. 3) reports that this was

> . . . a very comprehensive operation, including all basic elements of a curriculum reform: Analysis of national educational objectives, formulation of new course contents . . . re-orientation of the teaching staff, development of teaching aids and evaluation.

In such a vast framework, the scope for mischief (i.e., the importation of alien ideas, techniques, etc.) was obviously very great. Yet there is no evidence to suggest that the project did anything other than support the implementation of the clearly defined national policy of primary education reform.

Indeed, it may be at least speculated that where Tanzanian educational policy was clear and forceful (as was the case in this instance) the margin for negative foreign influence was curtailed. Conversely, where national policy was weak or nonexistant, external influence could work in ways inconsistent with the self-reliance policy. Technical education seems to be an example in this regard. The Lewis group (1971, pp. 6.1, 6.8, 6.16) reported that "technical education and training is obviously of central importance to Tanzania's learning system. . . ." Yet it also noted that "the Ministry of National Education has no clear rationale for the development of technical education. . . ."

In this policy vacuum, foreign assistance was thus allowed free rein, with apparently unfortunate results.

> The programs of technical education and training are the outgrowth of technical assistance and aid from many diverse sources. The result is a collection of projects rather than a coherent system of learning, due in some cases to the approaches of different donor agencies which have not been compatible.

Not only were there incompatibilities among varying foreign programs. There seems also to have been a fundamental divergence between them, on one hand, and the self-reliance policy and its links with the non-"modern" development model, on the other hand. According to Lewis et al., the foreign programs' "major orientation is toward the needs of the modern sector and urban development."

As already indicated in the chapter on educational goals, Tanzania does not seem to have evolved a comprehensive policy of non-formal education. It might, therefore, be expected that international influence in the non-formal sphere would be all the stronger for the lack of a relevant national policy. This does not, in fact, seem to be the case, for the simple reason that (unlike the situation in the formal sphere) there is no well developed external model of non-formal education forceful enough to be imposed on the country. In the words of Hall and Mhaiki (1972, p. 35):

> Contrary to the building of dams or the mechanization of agriculture, in adult education there is no model to follow. There is no experience elsewhere in a program of [the kind in Tanzania]. The Tanzanian position is unique in numerous fields.

Nevertheless, with regard to certain individual programs (as opposed to overall policy) of non-formal education, foreign influence has been exercised. These appear clearly in the area of literacy, for example. Here, Tanzania was a major participant in the 11-country Unesco/UNDP Experimental World Literacy Program.

The scope for foreign influence in this framework was considerable. According to Functional Literacy Curriculum . . . (1973, p. 4), the following sat with voice (albeit without vote) on the high-level National Coordination Committee for literacy work: the UNDP Resident Representative, the Unesco Chief of Mission, the Chief Technical Adviser for the Unesco/UNDP project, and representatives of FAO, ILO and WHO. As well as considerable, the scope for foreign influence was continuing. Beginning in 1968, the Unesco/UNDP project was only to last four years. Viscusi (1971, p. 37) refers to

> . . . the end of 1972, when the Tanzanian pilot literacy project is expected to finish operations, the last international experts will turn in their final reports, pack up and leave

> Tanzania. The 'United Nations Development Programme' insignia will come off project vehicles. . . .

In fact, the project was extended for at least two years beyond the originally planned termination date, according to Large-Scale Project Approved . . . (1974, pp. 1-2).

The question remains as to whether the considerable and continuing influence so exercised in the literacy field was compatible with--or antithetical to--education for self-reliance and ujamaa socialism. Viscusi's description of the national/foreign relationship is prudent to the point of euphemism (1971, p. 39).

> The literacy pilot project is an experimental undertaking; the role of [foreign] project staff, whatever their personal commitments and beliefs, is to act cautiously, soberly, in a spirit of scientific enquiry. Tanzania is a country in a hurry, increasingly conscious of the long road it has to travel [and that] education [is] the way out of poverty. . . . The interplay between these two wills--one saying: go slowly, wait and see; be questioning and critical; the other saying: we have a task to do, give us the means to accomplish it--makes for an effort rich in creative energy.

In reality, it appears that the "interplay of wills" was at least sometimes conflictual. From the above, it is evident that the conflict concerned the timing of operations, among other things, with Unesco and UNDP taking a gradualist approach that clashed with Tanzania's desire to move ahead more quickly. This gradualist approach reflected a basic assumption prevalent in UN circles during the mid-1960s, when the Experimental World Literacy Program was launched. As summarized by Gillette and Spaulding (1975, p. 170), this assumption was that

> . . . . if largely illiterate nations were not making better progress with literacy, it was because singly they were incapable of doing so. Individual national incompetence had to

> be compensated for (in this view) by joint international competence under the intellectual leadership [of the concerned international aid agencies]. . . . This unfortunate logic ignored the wishes of at least certain [participating countries, including Tanzania, which] wanted national literacy campaigns [rather than limited experimental projects]. . . . To a degree, the EWLP may even be said to have delayed progress toward mass literacy in these cases.

Perhaps even more serious than disagreements over the rate of progress international agencies would help Tanzania achieve in the field of literacy, was a conflict over the kind of literacy to be offered. This reflected in turn a divergence of views about education and its relation to development.

According to Gillette and Spaulding (1975, p. 164) the following syllogism underlay the First UN Development Decade (1960-1970), of which the Experimental World Literacy Program was a basic component: "development is economic growth; but economic growth is a technical process; therefore development is technical." The extension of this thinking to literacy led to the harnessing of the three R's with vocational training in an effort to achieve the overarching aim of increased productivity. Thus, for the Experimental World Literacy Program, the new literate was first and foremost a more productive worker and farmer.

Such a narrowly economic focus was clearly at odds with the broader and more ideological approach of education for self-reliance. President Nyerere has consistently attempted to place the economic function of education in a wider perspective. Recently (1975, p. 5) he declared that

> Africa has great need of men with technical knowledge and our freedom is restricted by the absence of such men. I am not arguing against technical training in favour of what are sometimes called the liberal arts. On the contrary, in Tanzania just now

> we are engaged in a major exercise aimed at giving our education a practical and technical bias. What I am trying to do is to make a serious distinction between a system of education which makes liberated men and women into skilful users of tools and a system of education which turns men and women into tools. I want to be quite sure that our technical and practical education is an education for creators, not for creatures. I would like to be quite sure that our education institutions are not going to end up as factories turing out marketable commodities. I want them to enlarge men and women and not convert men and women into efficient instruments for the production of modern gadgets.

Given the conflict of principle between the UN approach to literacy and the policy of education for self-reliance, why did Tanzania take part in the UNDP/Unesco World Program? That the World Program would not help Tanzania on her own terms was clear from the outset. According to Viscusi (1971, p. 39, emphasis added) "the country . . . accepted the [UNDP-Unesco] concept of work-oriented literacy. . . ." Why such acceptance on the part of a country that had charted its own self-reliant course of educational development? One fundamental reason was probably that initial negotiations for Tanzanian participation in the World Program took place in 1965, two years before the declaration on self-reliance. Thus the new policy was pre-empted, in the literacy area, by foreign influence, which filled the national policy vacuum.

There was at least one other reason, however Gillette and Spaulding (1975, p. 170) suggest that certain Experimental World Literacy Program participant countries "seem to have 'bought' the EWLP 'product' . . . in part because they saw no prospect of obtaining international aid [for literacy] in any other way."

The situation in the sphere of cooperative education, where there was considerable and continuing foreign (particularly Scandinavian) influence, appears to have been less directly conflictual than in literacy work. According to Grabe (1972, p. 10),

> The objectives and policies for cooperative education have . . . been determined in the light of the specific Tanzanian situation and the long-term policies of transforming the society on the basis of socialist self-reliance.

On the other hand (emphasis added) "the *programs* and *techniques* applied in cooperative education have . . . borrowed heavily from British precedents and Scandinavian patterns and practices." Thus, Grabe points out (1972, p. 63) that correspondence and other written materials "seem to have considerable Scandinavian bias and are not always relevant to the Tanzanian situation."

In summary, there has been scope for considerable and continuing foreign influence on formal and non-formal concepts and policies. In the formal sphere, this influence does not seem to have had effects incompatible with self-reliance and *ujamaa* socialism where it was exercised in areas (e.g., primary education reform) where clear and forceful Tanzanian policy existed. Conversely, where such policy was absent (e.g., technical education), there seems to have been a fundamental divergence between foreign influences, on one hand, and self-reliance and *ujamaa* socialism, on the other.

In the non-formal sphere, there was no overall external model to import, which made for Tanzanian originality. Nevertheless foreign influence does seem to have given rise to conflict: between the ambitiousness of the self-reliance policy and the "lowest-common-denominator" prudence of the Unesco-UNDP technocracy (in literacy); between the *ujamaa* socialist and humanist concept of the nature of education's relation with development and the Unesco-UNDP technocracy's growth- and productivity-oriented approach (also in literacy); and between Tanzanian objectives and policies, on one hand, and British and Scandinavian programs and techniques (in cooperative education).

Conclusions

A first major conclusion emerging from this chapter is that there are important similarities in the ways formal and non-formal education experience foreign influences in Tanzania. In both the formal and non-formal spheres, donors to programs reflecting a "modernizing" notion of development--or programs not particularly compatible with the rural non-"modern" approach of the self-reliant policy--are found predominantly among NATO countries and multilateral sources (World Bank and UNDP), although including one nominal neutral. In both spheres, moreover, such programs attract the lion's share of foreign aid, taking together fully 70% of bilateral aid.

Conversely, donors to programs reflecting the rural non-"modern" approach to development--or programs not notably compatible with urban "modernizing" development--a group chiefly composed of non-NATO countries (in addition to two NATO countries in the formal sphere), including a nominal neutral, one strongly non-aligned country and one member of the Warsaw Pact; they also include multilateral sources (World Bank and UNDP). Although receiving a large share of multilateral help (totalling 65% of World Bank aid to education), they attract, together, but one-quarter of all bilateral aid to education.

Another common point is that where a policy that is both strong and consistent with education for self-reliance does not exist at the program level (technical education in the formal sphere, literacy in the non-formal sphere), foreign thinking seems to have an influence that is incompatible with the self-reliance policy.

Secondly, however, there are a number of dissimilarities--or at least incoherencies--among the ways foreign influence affects the formal and non-formal spheres. For one thing, while formal education has received a decreasing share of overall aid to education the percentage going to non-formal education has been increasing. Furthermore, although a policy consistent with self-reliance has enabled Tanzania to shape at least one foreign-aided program in the formal sphere appropriately (primary education), a similar policy in the case of one non-formal program (cooperative education) has not been successful in preventing the infiltration of inappropriate foreign influences. Finally, it appears that while aggregate multilateral aid is shared out fairly equally between various kinds of formal and non-formal programs (consistent with the self-reliance policy or not), UN policies do not display particular interagency coordination. Thus, UNDP has given one-third of its aid to non-formal programs consistent with rural, non-"modern" development and another third to formal programs compatible with "modernizing" urban development, while the World Bank seems to have focused its help (65% of its aid to education) on formal and non-formal efforts compatible with rural, non-"modern" development.

This chapter has made clear that, in the strict sense and with regard to both formal and non formal education, Tanzania's policy of education FOR self-reliance has not been implemented through what could be called education BY self-reliance. Unlike certain other Third World countries (e.g., China after the Soviet withdrawal, Cambodia after Liberation and--to a degree--Guinea-Conakry), Tanzania has continued to seek and accept amounts of educational aid which, although a decreasing percentage of total resources when compared to rising national expenditure, remain considerable.

A crucial question, given the warning sounded in the introduction to the present chapter, is then: does Tanzania seem to have been able to make aid serve--rather than disrupt--the implementation of education for self-reliance? It would not seem that this question can be answered, with any assurance, by a simple "yes" or "no."

To some extent, Tanzania does seem to have taken advantage of external influence and aid to further the policy of education for self-reliance. This appears to have happened in two ways. First, the geo-political diversification of bilateral donors seems to have opened new channels (particularly--although not exclusively--among non-NATO countries) for assistance to formal and non-formal programs more in line with rural, non-"modern" development. Tanzania has also benefited from the evolution of at least certain multilateral agencies' approaches to educational aid; cf. the World Bank's concentration on self-reliance-consistent programs. Secondly, in at least one case in the formal sphere (primary education) a strong program-level policy consistent with self-reliant reform does seem to have minimized (and perhaps totally neutralized) the alienating potential of a foreign contribution.

Nevertheless, in important ways foreign influence and aid have diverged from or even worked against the policy of education for self-reliance and the ujamaa socialist society it is meant to bring into being. Nearly three-quarters of bilateral aid, and a good part of multilateral assistance (e.g., one-half of UNDP aid) go to programs that are compatible with urban "modernizing" development, or at least not notably consistent with rural, non-"modern" development. Such a bias cannot but bolster non-revolutionary or counter-revolutionary educational concepts. In such cases, foreign influence may shape Tanzanian thinking and action rather than the reverse--the forced[7] importation of the Unesco/UNDP approach to literacy being a case in point. Negative foreign influence seems to find particularly fertile ground where education for self-reliance has not been translated into policy at the program level. This appears to have happened with regard both to literacy and, in the formal sphere, technical education. Yet even where program-level policy consistent with self-reliant education exists, foreign influence can be inappropriate, as in the case of cooperative education.

---

[7] "Forced" because countries wanting international aid for literacy were given no alternative but to accept the Unesco/UNDP approach.

SOME TENTATIVE CONCLUSIONS

SOME TENTATIVE CONCLUSIONS

A number of tentative conclusions emerge from the previous chapters and may for convenience's sake be grouped as answers to the questions asked in the Introduction of this study. The questions were:

> What relationships between formal and non-formal education seem to be emerging in Tanzania, and what are the chief characteristics of these relationships?
>
> What models of socio-economic development seem to be reflected in the relationships between formal and non-formal education?
>
> More broadly, what do the answers to these questions seem to suggest about the contemporary evolution of the Tanzanian revolution?

With regard to the first question, a major conclusion of each chapter of the case study was that in important ways formal and non-formal education are both dissimilar and similar. The most salient points of divergence and convergence[1] may be summarized in the following matrix of formal and non-formal education's respective responses to relevant educational issues.

A first conclusion emerging from this comparison would seem to be that *there continue to exist two streams of education in Tanzania, the formal and the non-formal, readily identifiable as separate entities.* By merely observing the setting, listening to the language spoken, noting

---

[1] "Points of divergence" are areas where formal education's responses to a given issue (e.g., goals, amount of education, etc.) seem more dissimilar than similar to those of non-formal education. "Points of convergence" are areas where responses seem more similar than dissimilar. It should be kept in mind that although useful for the purpose of summarizing, this approach is a subjective and possibly arbitrary representation of a very complex reality.

TABLE IV

CONVERGENCES AND DIVERGENCES

	FORMAL EDUCATION	NON-FORMAL EDUCATION
Goals	Divergence	
	Goals stated globally for medium and long term	Goals stated sectorally for short and medium term
	Convergence	
	Goals formulated at conceptual and operational levels, with non-formal elements in reformulated goals of formal education. Stated goals rooted in thought of President Nyerere, precepts of *ujamaa* socialism and application of ideology to reality. Feature a balance between individual and collective concerns. Stress the utility and actual use of knowledge imparted.	
Amount of Education	Divergence	
	Multi-tiered system serving (especially post-primary levels) a privileged minority	Collection of unrelated terminal programs serving broad less privileged audience (not including certain managerial and professional upgrading programs)
	Convergence	
	Shared principle of basic education for all (via primary school in formal sphere); extension of educational opportunity to females. Primary and non-formal are overwhelmingly rural, equitably sited, focused on *ujamaa* villages.	
Kind of Education	Divergence	
	Subject matter (particularly post-primary) heavily academic. Classroom methods: deductive, cognitive, learner-passive; linked to exam/selection/promotion syndrome	Strong functional bias of subject matter. Methods: inductive, cognitive-and-psycho-motor balance, learner activating; linked to immediate applicability

TABLE IV--Continued

<table>
<tr><th></th><th>FORMAL EDUCATION</th><th>NON-FORMAL EDUCATION</th></tr>
<tr><td>Kind of Education (cont.)</td><td colspan="2">Convergence
Vocational and political stress on curricula. Formal (primary and secondary) outside classroom and non-formal methods inductive, varied, practical and learner-activating. Universal (primary and non-formal) or increasing (post-primary formal) use of Swahili as medium of instruction.</td></tr>
<tr><td>Resources</td><td colspan="2">Divergence</td></tr>
<tr><td></td><td>Credentialled professionalism of teachers; severe lack of appropriate textbooks; global strategy re plant</td><td>Pragmatic recruitment of leaders including non-professionals; sufficient appropriate texts; no strategy--and contradictory practice--re plant</td></tr>
<tr><td></td><td colspan="2">Convergence
Massive recruitment and massive and practical training or upgrading of instructional staff; decentralized training/upgrading of formal (primary) teachers and non-formal leaders. Shared use of primary teachers for formal and non-formal instruction. Use of simple and adapted equipment and relatively unsophisticated technologies.</td></tr>
<tr><td>Financing</td><td colspan="2">Divergence</td></tr>
<tr><td></td><td>Moderate budget growth; professional pay scale for teachers. Education viewed as consumption or investment yielding only long-term benefits. Less successful self-financing.</td><td>Very rapid budget growth. Bulk of leaders paid at subprofessional rates. Education viewed as having short-term economic benefits. More successful self-financing.</td></tr>
<tr><td></td><td colspan="2">Convergence
Capital costs cut by shared use of formal (primary) and non-residential non-formal facility: Community Education Center. Similar costs per hour of instruction at middle and lower ranges of formal and non-formal education. Explicit aim of self-financing.</td></tr>
</table>

TABLE IV--Continued

	FORMAL EDUCATION	NON-FORMAL EDUCATION
Organization	Divergence	
	Long-term global planning to meet high level urban-oriented manpower needs. Increasing role of private secondary schools. Single-ministry responsibility. Centralization of (post-primary) administration.	Short-term fragmented programming with rural focus. Absence of private initiative. Fragmented multi-ministry responsibility. Decentralized administration.
	Convergence	
	State responsibility, crucial role of TANU and allied political bodies, use of non-educational agencies of Government as auxiliaries, widespread notion and practice of partial self-government of educational groups/institutions, decentralization of (primary and non-formal) administration.	
Foreign Influences	Divergence	
	Decreasing share of foreign aid.	Increasing share of foreign aid.
	Convergence	
	Decreasing overall dependence on foreign aid.	

the characteristics of learners and instructors, watching the teaching methods used and perusing the curriculum, even a little informed visitor would know, for example that he or she had happened on a secondary school classroom and not a radio education study group.

It is, however, equally evident that there are important convergences, even areas of overlap, between formal and non-formal education. Coming upon a group of older teenagers working a shamba even an observer knowledgeable about education in Tanzania might be hard put to guess whether they were secondary school students or literacy pupils or teacher trainees--or even university students doing their nine-week yearly field stint.

Furthermore, it appears that formal education has evolved more in the direction of non-formal education than the reverse. To be sure, a few non-formal programs (particularly urban management and vocational training projects with origins pre-dating the self-reliance policy) seem to serve as a kind of para-school. It also seems that aspects of other non-formal programs (e.g., the heavy structure approach of residential rural training programs such as the RTC's and MATI's) give them something of a formal aura. But on the whole, it appears that formal education has been particularly vulnerable to penetration by thinking and practices usually associated with non-formal education--although this study has produced no evidence suggesting that the penetration of formal education by non-formal characteristics is the result of a conscious strategy.

It may, rather, possibly be attributed to two factors touched on in the case study. First is the objective relevance of the non-formal approach for Tanzanian reality. Compared with what can only be called an alienating school system, the responses of non-formal education to such crucial issues as the content, methods and leadership of education simply make good sense. It would seem logical, then, that a national leadership that is aware of the inadequacies of formal education and seeking to remedy them should arrive independently at solutions of a non-formal nature.

Secondly, it is possible to speculate that the extraordinarily rapid and massive growth of non-formal education in Tanzania during the period studied may have greatly enhanced its potential for influencing the formal sector. According to Gillette ("Tanzania . . .", 1975, p. 12), "there are more enrolees in literacy, adult education and other non-formal programmes than primary pupils," confirming London's assertion (1973, p. 441) that, to refer to but one form of non-formal learning, adult education "has ceased to be marginal. . . ." Thus, thinking along non-formal lines has become a force to be reckoned with, a strong breeze in the intellectual air breathed by educators.

In some respects, the evolution of formal education in the direction of non-formal education is very limited. Most lectures at the University, or classroom work at the secondary or primary level, still seem generally to follow the earlier formal pattern, for example. In other respects, however, the evolution has yielded palpable changes. In this context, mention may be made of school pedagogy outside the classroom, the stress (in principle, at least) on the immediate utility of knowledge imparted, and the attempts at self-government in educational institutions.

A further conclusion emerging with some clarity is that the level of formal education having evolved most markedly in the direction of non-formal education is the primary school. It has been suggested that this may be the case because like the bulk of non-formal programs, but unlike post-primary formal education, primary schooling is intended chiefly to provide the rural population with basic education that will be of use in a rural setting. The village-level Community Education Center, shared by primary schooling and non-formal programs, is a physical symbol of this commonality of function. It might even be interpreted as the first tangible sign of an incipient merger of formal and non-formal education.

In summary, it appears that although formal and non-formal education have not fully merged into a single educational system, they are in several important respects tending to converge, and that this convergence expresses itself in the evolution of the responses of formal education (particularly primary schooling) in the direction of non-formal thinking and practice. Indeed two kinds of education now seem to exist in Tanzania that overlap but cut across the traditional formal/non-formal dichotomy. The first includes post-primary formal education and a small number of non-formal programs that appear to serve as para-schooling, in addition to certain aspects of other non-formal programs. The second is comprised of the majority of non-formal programs and much of primary schooling, in addition to certain aspects of formal education at other levels.

How may this new dichotomy be explained? Considerations of a narrowly educational nature seem less helpful in elucidating the issue than an attempt to deal with it in a broader context. Preliminary chapter-by-chapter conclusions of the case study suggest that just such a context is offered by the second major question asked by this study: What models of socio-economic development seem to be reflected in the relationships between formal and non-formal education? As background to treatment of this question, the salient socio-economic features and implications of the two kinds of education just alluded to may be summarized in the following matrix. Type A includes post-primary formal education, a small number of non-formal programs and certain aspects of other non-formal programs. Type B includes most non-formal programs, much of primary schooling and aspects of other levels of formal education.

A first conclusion[2] that emerges from this comparison is that education of type A seems to be not particularly compatible with the ujamaa socialist model of socio-economic development while being rather more compatible with the urban-oriented and "modernizing" model. A concerted and conscious manipulation of education by counter-revolutionary groups in order to slow or prevent the advent of ujamaa socialism is not suggested here, if only because an extensive and well organized counter-revolutionary conspiracy simply does not seem to exist in present-day Tanzania. Nevertheless, there does appear to be a congruence between this kind of education (particularly its function of preparing learners for access to the technocratic elite) and the objective interests of the now privileged stratum that stands to suffer most from a radical and

---

[2] It is well to stress again the risk of oversimplification inherent in this kind of global analysis, and the consequent tentative nature of the conclusions now drawn.

TABLE V

TWO KINDS OF EDUCATION

	TYPE A	TYPE B
Goals	Education for self-reliance to serve *ujamaa* socialism. Self-reliance to be achieved through self-sufficiency in high-level manpower defined in Western, urban-oriented and "modernizing" terms.	Education for self-reliance to serve *ujamaa* socialism. Self-reliance to be achieved through relevance of education for rural population closest to grass roots.
Amount of Education	Multi-tiered promotion of a minority into middle and highest levels of urban-oriented "modern" occupational structure.	Terminal basic education to prepare the mass for low and middle-level rural non-"modern" occupations.
Kind of Education	Academic, stress on "modern" science. Traditional classroom pedagogy linked to exam/selection/promotion syndrome. Widespread if decreasing use of English as medium of instruction.	Practical curriculum, stress on local (rural) utility. Innovative pedagogy linked to applicability of learning. Swahili nearly universal medium of instruction.
Resources	Credentialled professional instructors of "modern" socio-economic status: guardians of modern stability, although may have non-"modern" rural-oriented attitudes toward role. Heavier structure, external model of "minimum acceptable" facilities in which education can happen.	Mixed, but often non-professional instructors of non-"modern" socio-economic status: agents of self-reliant change, although may have "modern" urban-oriented personal aspirations. Lighter structure, relatively simple plant integrated with surroundings (including use of pre-existing plant).

TABLE V--Continued

	TYPE A	TYPE B
Financing	Medium to very costly. Relatively less successful at self-financing.	Least to medium costly. Apparently more successful at self-financing.
Organization	Planning in terms of high-level manpower. A non- or counter-revolutionary University. *De facto* derogation allowing affluent to escape from limitation on growth of secondary education. Centralized administration. Limited self-government.	Fragmented programming focusing on rural non-"modern" learners. Decentralized administration. Widespread self-government.
Foreign Influence	Chief foreign donors include NATO members, one neutral and UN system. Although decreasing, aid here is still large, e.g., over 1/2 of bilateral aid to education. Foreign influence incompatible with self-reliance where Tanzanian policy weak (e.g., technical education).	Chief foreign donors more varied, including NATO and Warsaw Pact members, two neutrals and UN. Aid sharply increasing. Foreign influence not incompatible with self-reliance where Tanzanian policy strong (e.g., primary education); but certain incompatibilities although no overall model of non-formal education to import.

equitable redistribution of power and wealth. Thus education of type A may be called urban-oriented and "modernizing" education.

Conversely, it seems fair to suggest that education of type B is not particularly compatible with the urban-oriented "modernizing" model of socio-economic development, while being rather more compatible with the ujamaa socialist model. Again, it would appear unwise to assume the existence of a grand strategy of educational development, revolutionary in this case. Revolutionary groups do exist (particularly TANU and related organizations), as does a global statement of long-term intent concerning an educational revolution (Education for Self-Reliance). Paradoxically, however, an effort does not seem to have been made by those groups to transform the intent into reality by concerted mobilization of the non-formal sector. We have seen, for example, that non-formal education appears to be a collection of programs (rather than a cohesive system), that its goals are stated sectorally (rather than globally), that it has adopted opposing approaches (rather than a single strategy) concerning plant, and that it is subject to short-term fragmented programming (rather than long-term global planning).[3]

Despite these weaknesses, it does appear that education of type B offers the best current opportunity for stimulating in the rural masses the kind of consciousness--and providing the kinds of knowledge and skills--without which it seems unlikely that ujamaa socialism can be achieved. For this reason, education of type B may be interpreted as being the nearest thing Tanzania has to education for self-reliance, and may thus be called *ujamaa* socialist education.

---

[3] These defects do not appear in the other major area of education of type B, primary schooling.

Lest the identification of two opposing kinds of education be thought an overly rigid and clear-cut conclusion, it may be pointed out that *in addition to the fundamental (or primary) contradictions between urban-oriented "modernizi[illegible] education and ujamaa socialist education, there also seem to exist other (secondary) contradictions within each kind of education*, illustrated by the following examples among others that could be given.

While education of type A has declared goals derived from the ideology of *ujamaa* socialism it seems in fact to serve the urban-oriented "modernizing" model of development. Inside the classroom the pupil or student in formal education (including primary school) is liable to receive rather academic instruction linked to the exam/selection/promotion syndrome and thus to the urban-oriented "modernizing" model of development; outside the classroom he or she is more likely to receive practical and service-oriented education more consistent with *ujamaa* socialism. Although RTC's and MATI's are primarily institutions of *ujamaa* socialist education with respect *inter alia* to their learners, curricula and pedagogy, their heavy structures also place them partly in the urban-oriented "modernizing" camp as regards their responses to issues of financing and plant.

Returning to the primary contradictions, comparison of the two matrices presented above yields a further tentative conclusion, i.e., that *areas of convergence between formal and non-formal education tend to resemble ujamaa socialist education (type B) much more closely than urban-oriented "modernizing" education (type A), the latter being often* *at variance with the areas of convergence*. This would seem at least not to contradict the evidence on Cuba presented in the Introduction to this study to the effect that one important feature of revolutionary education may well be a trend toward integration between formal and non-formal education.

To summarize, it has been suggested that in Tanzania since the 1967 declaration of the policy of education for self-reliance:

1. Formal and non-formal education have not fully merged;
2. They are nevertheless tending to converge;
3. This convergence expresses itself in the emergence of two kinds of education overlapping but cutting across the traditional formal/non-formal dichotomy;
4. The new dichotomy is a series of primary contradictions between *ujamaa* socialist education and urban-oriented "modernizing" education;
5. There are secondary contradictions within each of these two kinds of education;
6. Much more than urban-oriented "modernizing" education, *ujamaa* socialist education resembles the areas of convergence between formal and non-formal education;
7. This resemblance seems at least not to contradict the proposition that revolutionary education is likely to feature a merger between formal and non-formal education.

Finally, and more broadly, what do these tentative conclusions seem to suggest about the contemporary evolution of the Tanzanian revolution? As already stated, important areas of convergence between formal and non-formal education have emerged since 1967, and on the whole these areas of convergence do seem rather more than less compatible with revolutionary *ujamaa* socialist education. Nevertheless, a full merger of formal and non-formal education has clearly not taken place. There are areas of sharp divergence between them which overlap (although also cutting across) the formal/non-formal dichotomy. This situation may be interpreted variously, as one of incipient albeit gradual merger, or as one of direct and open conflict, characterized in any event by many primary and secondary contradictions.

One conclusion that could be drawn from this situation is that since a complete merger of formal and non-formal education has not (yet) taken place, the Tanzanian revolution itself is an ongoing process that has not (yet) been fully victorious. This is the more plausible since the Tanzanian leadership has not claimed total victory to date, in education or other fields. Also, certain critics (cf. for example Shivji, 1973; and Loxley and Saul, 1975), while accepting that revolutionary strides have been taken in Tanzania, stress the length and difficulty of the path the Tanzanian revolution must still travel. It may furthermore be pointed out that although a full merger of formal and non-formal education has not taken place, the moves since 1967 toward convergence in vital areas have been important and unmistakable.

As above, nevertheless, Tanzania's experience may not be called conclusive. To the extent that the characteristics of the relationships between formal and non-formal education are still ambiguous, even contradictory, they may well reflect broader and deeper ambiguities and contradictions in Tanzanian society--and its revolution--at large.

In particular, it seems not beyond the realm of possibility that the evolution of the relationships between formal and non-formal education reflect antagonistic interests and aspirations of a traditional Western-oriented "modern" and urban socio-economic stratum, on one hand, and a new socialist-inspired non-"modern" rural stratum, on the other.

Whether these strata are classes is perhaps still a moot question. The first stratum does not own the commanding heights of the means of production, for example, and thus is possibly not strictly speaking a national bourgeoisie. But to the extent that it manages the economy in a context of continuing social disparaties from which it benefits, it does have a vested interest in the status quo and this interest would seem in direct contradiction with the interests of the other stratum referred to, which only stands to gain from a more egalitarian distribution of national wealth and power.

At best, the relationships between formal and non-formal education--and the socio-economic ambiguities, contradictions and antagonisms they seem to reflect--suggest that the Tanzanian revolution is still aborning.

BIBLIOGRAPHY

Adult Education and National Development in Tanzania. Dar es Salaam: Ministry of National Education, 1974.

Akwenye, O.S. Education for Self-Reliance in Tanzania: From Theory to Practice, 1969-1974. Montreal: McGill University (ms.), 1975.

Annual Review of the Country Programme for UNDP Assistance. New York: UNDP, 1972 (mimeo).

Another Development. Upsala: Dag Hammarskjöld Foundation, 1975.

The Arusha Declaration. Dar es Salaam: Tanganyika African National Union, 1967.

Bansart de Fays, A. Edeucación Extraescolar de la Juventud. Santiago de Chile: Pontificia Universidad Católica de Chile, 1974.

Berlin, G. Report on a Mission to Kenya, Tanzania and Botswana. Dakar: Unesco Regional Office for Education in Africa, 1972 (mimeo).

Bienefeld, M.A. "Planning People." Development and Change. The Hague: Institute of Social Studies, No. 1, 1972-1973.

Biswalo, P.M. "Tanzania's National Service." Seminar on University Study-Service Schemes. Geneva: International Secretariat for Volunteer Service, 1973 (mimeo).

Bourquin, A.-M.; Diallo, A.-A.; and Patané, O. Recherche de la Specificité feminine dans un Système occidental et Position de la Femme dans la Société africaine francophone. Paris: University of Paris VIII, Department of Education Sciences, 1974 (ms.).

Bowles, S. "Cuban Education and Revolutionary Ideology." Harvard Educational Review. Cambridge, Mass.: 1971, No. 4.

Bukoba, B.B. "The Effect of Traditionalism on Rural Development: The Omuranazi Ujamaa Village, Bukoba." In Building Ujamaa Villages in Tanzania. Edited by J. Proctor. Dar es Salaam: Tanzania Publishing House, 1971.

Callaway, A. "Planning Out-Of-School Education for Development." In Planning Out-Of-School Education for Development. Edited by J. Ryan. Paris: Unesco-International Institute for Educational Planning, 1972.

Cameron, J., and Dodd, W.A. *Society, Schools and Progress in Tanzania*. Oxford: Pergamon Press, 1970.

Chizhov, N.N. *Tanzaniya*. Moscow: Nayuka , 1972.

Colletta, N. *Whither Non-Formal Education: The State of the Art*. Jakarta: Pusat Inovasi Dan Teknologi Pendidikan, Ministry of Education, 1975 (mimeo).

Le Concept de l'Alphabétisation Fonctionnelle: Genèse, Objectifs et Hypothèses du Programme Expérimental Mondial d'Alphabétisation. Paris: Unesco, 1974, ED-74/CONF/660/3.

Coombs, P. *The World Educational Crisis: A Systems Analysis*. New York: Oxford University Press, 1968.

Coombs, P., with Ahmed, M. *Attacking Rural Poverty: How Nonformal Education Can Help*. Baltimore: Johns Hopkins University Press, 1974.

Coombs, P., with Ahmed, M., and Prosser, R. *New Paths to Learning for Rural Children and Youth*. New York: *International Council for Educational Development*, 1973.

Conferencia sobre la Familia, la Infancia y la Juventud de Centroamérica y Panamá: Informe Final. Ciudad de Guatamala: Editorial José de Pineda Ibarra, 1973.

Considerations for the Formulation of National Strategies vis-à-vis Rural Youth in the Developing Countries. Rome: FAO, 1972, ESH/MISC/72/19.

Costa, E. *Youth Training and Employment Schemes in Developing Countries*. Geneva: I.L.O., 1972.

Davidson, B. *The Lost Cities of Africa*. Boston: Little, Brown and Co., 1959.

De Jongh, J.F. "School and Society in Sukumaland." In *Primary Education in Sukumaland, Tanzania: A Summary*. The Hague: Wolters-Noordhoff, 1969.

Dubbledam, L.F.B. *The Primary School and the Community in Mwanza District, Tanzania*. Groningen: Wolters-Noordhoff, 1970.

L'Education en Afrique: Evolution, Réformes, Perspectives. Paris: Unesco, 1975, ED-76/MINEDAF/3.

Education in a Rural Environment. Paris: Unesco, 1974.

Education: Sector Working Paper. Washington, D.C.: World Bank, 1974.

Education and Training and Alternatives in Education in African Countries. Dar es Salaam and Upsala: Institute of Development Studies and Dag Hammarskjöld Foundation, 1974 (mimeo).

Eliufoo, S.N. "Education: A New Era Begins." In *Self-Reliant Tanzania.* Edited by K.E. Svendsen and M. Teisen. Dar es Salaam: Tanzania Publishing House, 1969.

El Jack, K. *Report on the Mission to Tanzania.* Dakar: Unesco Regional Office for Education in Africa, August, 1973 (mimeo).

Enfance, Jeunesse, Femmes et Plans de Développement. Abidjan: Unicef, 1972.

Evans, D.R., and Smith, W. "Non-Formal Education." In *Non-Formal Education in a World Context.* Amherst: Center for International Education, University of Massachusetts, 1973 (mimeo).

Faure, E.; Herrera, F.; Kaddoura, A.-R.; Lopes, H.; Petrovsky, A.; Rahnema, M.; and Ward, F. *Learning To Be.* London and Paris: Unesco--Harrap, 1972.

Fontaine, A. "Trois Visages de l'Afrique atlantique." *Le Monde.* Paris: 8 March 1973.

Foster, P. "Education for Self-Reliance: A Critical Evaluation." In *Education in Africa: Research and Action.* Edited by R. Jolly. Nairobi: East African Publishing House, 1969.

Freyhold, M.; Sawaki, K.; and Zella, M. "On the Slopes of Kilimanjaro." *Assignment Children.* Paris: Unicef, October-December, 1974.

Functional Literacy in the Context of Adult Education. Berlin: German Foundation for International Development, 1973 (mimeo).

Functional Literacy Curriculum, Programmes and Materials Development. Paris: Unesco, 1973 (ms.).

Gillette, A. *Cuba's Educational Revolution.* London: Fabian, 1972.

________. "Cuba's School in the Countryside: An Innovative Hybrid." *Training for Agriculture.* Rome: FAO, 1972.

________. "The Ecuador Non-Formal Education Project." *Prospects.* Paris: Unesco, Spring 1974.

________. "L'Education en Tanzanie: Une Réforme de Plus ou une Révolution éducationnelle?" *Tiers Monde.* Paris: October-December 1975.

________. *One Million Volunteers.* Harmondsworth, U.K.: Penguin Books, 1968.

________. "Tanzania: Self-Reliant Change at the Grass Roots." *Times Educational Supplement*. London: 10 January 1975.

________. "The Young Adolescent: An Untapped Resource." *Unicef News*. New York, 1974, No. 1.

Gillette, A., and Spaulding, S. *The Experimental World Literacy Programme: Lessons Learned from Eleven Projects (Draft)*. Paris: Unesco, 1975. ED-75/CONF.611/Col.1 (mimeo).

Giltrow, D.R. "Laura S. Kurtz, *An African Education: The Social Revolution in Tanzania*," *Africa Today*. Denver, Colorado: Summer, 1974.

Grabe, S. *The Cooperative Education System of Tanzania*. Essex, Connecticut: International Council for Educational Development, 1972 (mimeo).

Hall, B. *Adult Education and the Development of Socialism in Tanzania*. Los Angeles: University of California, 1974 (ms.).

________. *The Structure of Adult Education in Tanzania*. Paris: Unesco, 1975 (mimeo).

________. "The United Republic of Tanzania: A National Priority to Adult Education." *Prospects*. Paris: Unesco, 1974, No. 4.

Hall, B., and Mhaiki, P. *l'Intégration de l'Education des Adultes en Tanzanie*. Dar es Salaam: Institute of Adult Education, 1972 (mimeo).

Harman, D. *Community Fundamental Education*. Lexington, Mass., 1974.

Hatch, J. "Africa's Harvest of Hope." *The Guardian*. London: 11 February 1975.

________. "Regere Struggles to Sustain its Dreams." *The Guardian*. London: 14 December 1974.

Hatch, J.D. *Societal Relevance: An Issue in Rural Primary Education*. Amherst, Massachusetts: School of Education, University of Massachusetts, 1973 (ms.).

Hundsdörfer, V., and Küper, W. *Bibliography for Social Science Research in Tanzania*. Munich: Weltforum Verlag, 1974.

Husain, S. "The World Bank and Tanzania." *The Guardian*. London: 17 February 1975.

Illich, I. *Deschooling Society*. New York: Harrow Books, 1971.

Ingle, H.T. *Communication Media and Technology: A Look at Their Role in Non-Formal Education Programmes*. Washington, D.C.: Information Center on Instructional Technology, 1974.

International Cooperation in Education with Special Reference to the 25 Least Advanced Developing Countries. Paris: Unesco, ED-74/WS/[illegible] (mimeo).

Ishumi, A.G.M. *Community Education and Development*. Dar es Salaam: University of Dar es Salaam, 1974, (ms.).

________. *The Educated Elite: A Survey of East African Students at Higher Institutions of Learning*. Dar es Salaam: University of Dar es Salaam, 1973 (?) (mimeo).

Kaduma, I.M. "Twenty Years of TANU 'Education.'" In *Towards Ujamaa*. Edited by G. Ruhumbika. Dar es Salaam, Nairobi, Kampala: East African Literature Bureau, 1974.

Kassam, Y. *The Training and Functions of Full-Time and Professional Adult Educators in Tanzania: A Study of the Graduates of the Diploma Course in Adult Education of the University of Dar es Salaam*. Dar es Salaam: University of Dar es Salaam, 1973 (ms.).

King, J. *Planning Non-Formal Education in Tanzania*. Paris: Unesco-International Institute for Educational Planning, 1967.

Kinunda, M.J. *Experience in Tanzania in Identifying and Satisfying Local Needs in Education*. Paris: International Institute for Educational Planning, 1974 (mimeo).

________. *The Place of Evaluation in the Tanzanian System of Education*. Paris: International Institute of Educational Planning, 1974 (mimeo).

Knight, J.B. *The Costing and Financing of Educational Development in Tanzania*. Paris: Unesco-International Institute for Educational Planning, 1966.

"Large-Scale Multi-Media Health Education Campaign in Tanzania." *Adult Education*. Paris: Unesco, October-November, 1973.

Large-Scale Project Approved for the Government of the United Republic of Tanzania. New York: UNDP, 1974, DP/Projects/15 (mimeo).

Levin, L; Lind, A.; Lofstedt, J.-I.; and Torbiornsson, L. *U-Bildning Skola och Samhalle i Kina, Kuba, Tanzania och Vietnam*. Stockholm: Raben och Sjogren, 1970.

Lewis, A. (ed.), et al. *Tanzania: A Nation-Wide Learning System*. New York(?): American Council on Education, 1971 (mimeo).

London, J. "Modèle de Programmes d'ensemble pour l'Education de Base des Adultes du Tiers Monde." Discussions sur l'Alphabétisation. Tehran: Institut international pour les Méthodes d'Alphabétisation des adultes, September, 1973.

Loxley, J., and Saul, J. "Multinationals, Workers and the Parastatals in Tanzania." Review of African Political Economy. London: 1972, No. 2.

Malya, S. "What will our Literacy Graduates Read?" Studies in Adult Education. Dar es Salaam: University of Dar es Salaam, October, 1974 (mimeo).

Matheson, A. "The Spirit of Arusha." Unicef News. New York: Unicef, December, 1971.

Mbakile, E.P.R. "Evaluation du Projet pilote d'Alphabétisation des Adultes orientée vers le Travail, en Tanzanie." Discussions sur l'Alphabétisation. Tehran: Institut international pour les Méthodes d'Alphabétisation des Adultes, Autumn, 1974

Mbilinyi, M.J. "The Problem of Unequal Access to Primary Education in Tanzania." Dar es Salaam: Annual Social Science Conference of the East African Universities, Paper No. 21, December, 1973 (mimeo).

Mende, T. De L'Aide à La Recolonisation. Paris: Seuil, 1972.

Mtu ni Afya--An Evaluation, Studies in Adult Education, No. 12. Dar es Salaam: Institute of Adult Education, 1974 (mimeo).

Muncie, P. Torches in the Night: Educational Experiences in Tanzania and the Ivory Coast. Washington, D.C.: World Bank, 1973.

Musoke, I.K.S. "Building Socialism in Bukoba: The Establishment of Rugazi (Nyerere) Ujamaa Village." In Building Ujamaa Villages in Tanzania. Edited by J.H. Proctor. Dar es Salaam: Tanzania Publishing House, 1971.

Mwingira, A., and Pratt, S. The Process of Educational Planning in Tanzania. Paris: Unesco-International Institute of Educational Planning, 1967.

Najman, D. Education in Africa: What Next? Paris: Deux Mille, 1972.

"National Service--Staff Circular No. 5." Dar es Salaam: President's Office, 1967.

Nimpuno, K. School-Building Research Programme: Suggested Outlines for a School-Building Development Project. Dar es Salaam: Ministry of National Education, 1973 (mimeo).

Nonformal Education for Rural Development: An Interim Report on a Research Study for Unicef. Essex, Connecticut: 1973 (mimeo).

Non-Formal Education and Training in Africa. Paris: Unesco, 1973, EPP/2655/0873 (mimeo).

Nyerere, J. "Education for Liberation in Africa." Prospects. Pàris: Unesco, 1975, No. 1.

________. Education for Self-Reliance. Dar es Salaam: Ministry of Information, 1967.

________. Freedom and Unity. Dar es Salaam: Oxford University Press, 1966.

"Nyerere." The Internationalist. Oxford: October, 1970.

Odia, S. "Rural Education and Training in Tanzania." International Labour Review. Geneva: ILO, January, 1971.

Omo-Fadaka, J. "La Voie tanzanienne du Développement." Impact. Paris: Unesco, April-June, 1973.

Packard, P.C. "Management and Control of Parastatal Organizations." Development and Change. The Hague: Institute of Social Studies, No. 3, 1971-1972.

Paulston, R.G., and Leroy, G. Non-Formal Education and the Reconceptualization of Societal Development. Pittsburgh: School of Education, University of Pittsburgh, 1974 (mimeo).

Pilot Project of Functional Literacy. New York: UNDP-Special Fund, 1967 (mimeo).

Preliminary Education Projects for the Third Plan. Paris: Unesco, 1974, EFM/71. (This is a confidential document which has been used exclusively as a source for figures published elsewhere, particularly by official Tanzanian sources.)

Preliminary Results. Dar es Salaam: Institute of Adult Education, 1972(?) (mimeo).

Preuter, K. Are You Going Formal or Non-Formal? Toronto: Ontario Institute for Studies in Education, 1973 (ms.).

Primary Education in Sukumaland (Tanzania): Summary Report. The Hague: Wolters-Noordhoff, 1969.

Quelques Réflexions sur les Activités éducatives dans les Milieux ruraux des 25 Pays moins développés. Paris: Unesco, 1974, LDC/REF.8 (mimeo).

Resnick, I. The Economics of Manpower Development: The Tanzanian Case. Boston: Boston University, 1967 (ms.).

________. "Tanzania Educates for a New Society." Africa Report. Washington, D.C.: January, 1971.

Rodney, W. "African History and Development Planning." Models of Development. London: Student Christian Movement, 1973.

Salamé, N. Le Problème de l'Alphabétisation. Paris: University of Paris I, 1974 (mimeo).

Schulz, P. "Screening the Village Voice." Unesco Features. Paris: No. 644, 1973.

Second Five-Year Plan (1969-1974). Dar es Salaam: Government Printer, Vols. I and II, 1969.

"Self-Education." The Nationalist. Dar es Salaam: 27 December 1969.

Sheffield, J., and Diejomaoh, V. Non-Formal Education in African Development. New York: African-American Institute, 1972.

Shivji, I.G. "Tanzania: The Silent Class Struggle." The Silent Class Struggle. Dar es Salaam: Tanzania Publishing House, 1973.

Skorov, G. Integration of Educational and Economic Planning in Tanzania. Paris: Unesco-International Institute of Educational Planning, 1966.

Smith, W. Non-Formal Education or Not? Amherst: Center for International Education, University of Massachusetts, undated (1972) (ms.).

Sochor, E. "Education for Self-Reliance in Tanzania." Unesco Features. Paris: April (11), 1970.

Student Participation at Dar es Salaam University. Paris: Dar es Salaam University Student Association for the United Nations--Unesco, 1972 (mimeo).

Tansania oder die Andere Entwicklung. Zurich: Arbeitsgruppe Dritte Welt, 1972.

Tanzania. Paris: Unesco, 1973, ED/3188/26/11/73 (mimeo).

"Tanzania: DUSO's New Executive Declares War on Corruption." Bulletin. Brussels: Institut International pour l'Etude de l'Education, November, 1973.

"Tanzania's Massive Education Program Given World Bank Aid." Bulletin. Brussels: Institut International pour l'Etude de l'Education, April, 1973.

Third International Conference on Adult Education: Final Report. Paris: Unesco, 1972, ED/MD/25.

UNDP Assistance Requested by the United Republic of Tanzania for the Period 1972-1974 (revised). New York: UNDP, 1971, DP/GC/TAN/R.1 (mimeo).

Vacchi, L. "La politica educativa della Tanzania: l'educazione per 'l'autofiducia'." *Terzo Mondo.* Milan: December, 1973.

Varkevisser, C.M. *Socialization in a Changing Society: Sukuma Childhood in Rural and Urban Mwanza, Tanzania.* The Hague: Center for the Study of Education in Changing Societies, 1973.

Viscusi, M. *Literacy for Working: The Work-Oriented Literacy Project in Tanzania.* Paris: Unesco, 1971.

Vishnyakov, N. "Literacy Programme: A New Approach." *Bulletin.* Moscow: USSR National Commission for Unesco, No. 1, 1972.

Who What Where in Tanzania. Dar es Salaam: Government of Tanzania, 1971(?).

Wood, A.W. *Vocational and Social Training of Primary School Leavers in the African Countries of the Commonwealth.* London: Commonwealth Secretariat, 1969 (mimeo).

Zanolli, N.V. *Education Toward Development in Tanzania.* Basel: Pharos Verlag, 1971.